A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

OCTOBER 2, 1972

Commerce Today

Coming Developments in Business and Technology

New Competitive Export Thrust

Newsmemo

Businessmen in the United States are being offered important tips on Japanese commercial practices from the American Chamber of Commerce in Tokyo. The Chamber has sent to Commerce Department's Business Service Field Offices copies of its authoritative publications on Japanese employment, tax, patent and trademark matters and its 1972 business directory. The Chamber has earned a worldwide reputation for its continuing series of briefing sessions in Tokyo on Japanese business practices.

Downward trend of business in the aerospace industry in recent years has "slowed significantly, and indeed may have stopped," according to the Aerospace Industries Association, the trade association for the industry. Reasons for the industry's optimism are the decision to proceed with development of the space shuttle, resurgence of the economy and continuing increase in airline revenue passenger miles presaging new demand for additional transport aircraft and anticipated continuing growth of sales of non-aerospace products which represent 11 percent of the industry's total sales.

Are there profitable markets or investment opportunities for United States small businesses in the world's developing nation? The Overseas Private Investment Corp. is willing to advance up to $4,000 to a small company to find out. This new incentive program also provides that a portion of the survey repayment can be applied to the cost of insuring or financing projects if a "go" decision is made. OPIC, the quasi-governmental agency set up to spur activity by private United States firms in the developing nations, has full details at 1129 20th Street, N.W., Washington, D.C., 20527.

An unusual program of inter-American cooperation begins next week when Latin American scientists, university faculty members and students sail aboard DISCOVERER, a $10-million vessel of Commerce's National Oceanic and Atmospheric Administration fleet, in a ten-week program of marine research. Purpose of the program is to promote the education and training of marine scientists from five nations--Mexico, Jamaica, Trinidad and Tobago, Venezuela and Colombia --and Puerto Rico. This floating marine research school is part of the 15-nation Cooperative Investigation of the Caribbean and Adjacent Regions known as CICAR. Some NOAA projects will also be carried out during the voyage.

The Export-Import Bank of the United States has made its first direct loan to Romania. It's part of the financing back of a $3.2 million sale of U.S. equipment and services for an offshore drilling platform. The Romanians are paying 15 percent in cash, and the United States supplier is extending 10 percent in credit. Eximbank's loan is for 37.5 percent, and the institution is guaranteeing a Manufacturers Hanover Trust loan for the other 37.5 percent.

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Vol. II, No. 26, October 2, 1972

2 Economic Highlights

Record-breaking activity in homebuilding and a surge in demand for motor vehicles have provided most of the stimulus for the vigorous performance of retail sales over the past year. Growing confidence of consumers also has been a major factor in the retail sales gains, which have played a major role in the rapid growth of the economy over the past 12 months.

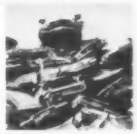
4 Competitive Assessment To Give U.S. Renewed Export Thrust

Far-ranging study of the conditions of worldwide competition today is being readied to assist U.S. sales in the international and domestic marketplaces.

7 Food Industry Sees Itself In Major Role If U.S. Goes Metric

First of a series on the impact of metric changeover on various industries should the U.S. decide to make the switch as recommended by the Commerce study.

10 U.S. Maps Campaign On Abandoned Autos



As many as 20 million rusty hulks of junked autos are ready for recycling presenting enormous problems for the scrap metal industry and the environment.

15 Growth vs. Environment: Must They Conflict? Recent Study Says No

The Sunset State tackles the problem of economic growth by developing a model permitting the State's decision-makers to examine the tradeoffs between development and the environment.

18 Domestic Business Report

Banks open purse strings to minorities—Postage stamps will cost same—Shipyard hiring outlook bright—Community projects create jobs—Lumber prices subject of hearing.

28 Science & Technology Report

Cities sink as natural resources withdrawn—Hill gets patent treaty for action—Quarter million saved on dental bills through research—SUMSTAT to provide easier access to federal statistics.

35 International Commerce Report

1000th "E" and 100th "E Star" awarded—Washington official trade briefs—Computer show sales top $93 million—German growth spurs imports—Kenya rallies from 1971 setback—Bangladesh relaxes import curbs.

COVER: *Principal speakers at the recent National Export Expansion Council meeting in Washington were (clockwise): Commerce Secretary Peter G. Peterson; Assistant Secretary of Commerce for Domestic and International Business, Andrew E. Gibson; Peter M. Flanigan, Executive Director of the White House Council on International Economic Policy; and Carl A. Gerstacker, Dow Chemical Company Board Chairman who is chairman of the NEEC.* *Story begins on Page 4.*

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ECONOMIC
HIGHLIGHTS

Retail Sales Soar As Building Materials, Appliances, Autos Show Sharpest Gains

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

Retail sales have put on a sizzling performance over the past 12 months, with most of the stimulus provided by record-breaking levels of activity in homebuilding and a surge in demand for motor vehicles.

Statistics indicate that the typical consumer is increasingly confident about his economic situation: consumer buying has trended sharply upward, a larger percentage of income is being spent, there is a willingness to increase debt in order to make purchases, and the largest increases in purchases have occurred in home furnishings, automobiles, and other discretionary items.

Total retail sales in July and August were up 10½ percent over the corresponding months of 1971. This is a substantial gain in real terms since prices of consumer goods have advanced only about 2½ percent over the past 12 months. (If food is excluded, average prices of consumer goods have gone up only about 2 percent).

Several underlying elements figured in the more frequent clicking of the cash registers. Income and employment have risen steadily, but the mood of consumers also was important because they started spending a larger proportion of their take-home pay. Other important factors were the Administration's New Economic Policy, put into effect in August 1971, and the sustained boom in homebuilding. Retail sales, led by automobiles, surged upward during the freeze last year, moved irregularly sideways for several months, and then, in early 1972, started climbing steeply.

As the second chart on the opposite page shows, sales of building materials and furniture and appliances are even stronger than automobiles, on the basis of comparisons with a year ago, and both are related to the sustained boom in homebuilding. The 10 percent gain for general merchandise indicates, however, that the retail sales upsurge is fairly broadly based.

The increases in auto sales have had a particularly strong stimulative effect on the economy because a higher proportion of the sales are domestic models rather than imports and this means more production and more jobs at American factories.

The installment debt increases of recent months have been extraordinarily large, reflecting the financing of autos, television sets, and other large purchases.

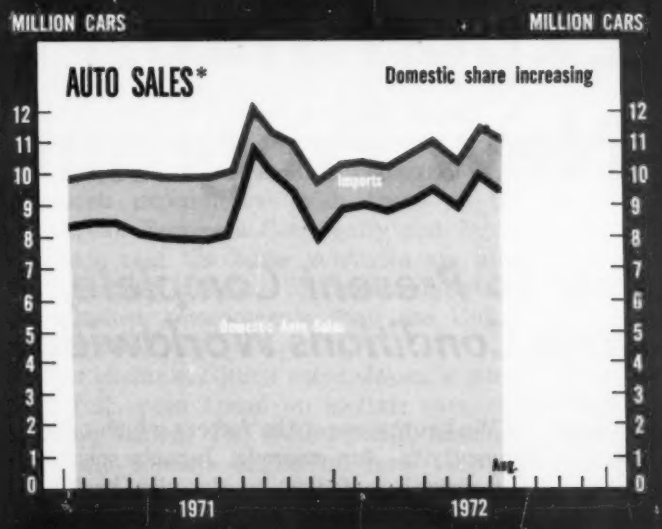
Consumer expenditures are of course highly significant for the economy as a whole, and they have played a major role in the rapid growth of the economy during the past year. Total consumer expenditures, including services as well as goods, account for about two thirds of Gross National Product.

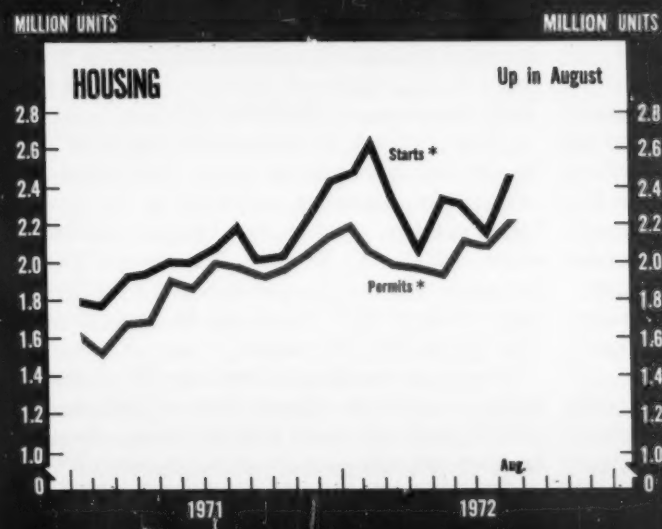
Further stimulus can be expected from the consumer sector: Housing starts rebounded in August and continue at a high level following spectacular gains from early 1970 to early 1972. This assures vigorous homebuilding activity for months to come and should continue to spur sales of related goods—building materials and furniture and appliances. The future looks bright for automobiles as well. Also, the strong upward trends in employment and purchasing power should bring further gains across the board.

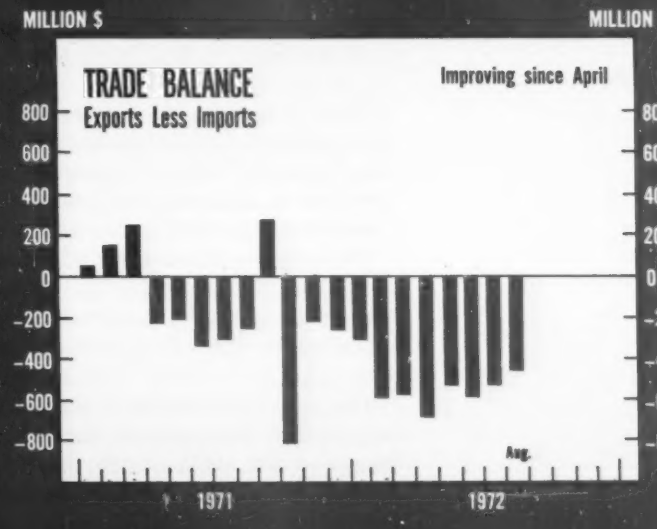
Other economic data

The trade deficit in August was the smallest since January. On a monthly basis, the trade deficit has been in an improving trend since the 1972 low point in April.

Latest Indicators







* Annual rates.
All monthly data seasonally adjusted.

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October 2, 1972

Renewed Export Thrust Is Aim Of New Program

Analysis By Specialists To Present Complete, Specific Picture Of Trade Conditions Worldwide

A program concentrating on conditions of worldwide competition today—such as growth trends, open or concealed barriers, subsidies or other stimulants, costs and productivity factors, investment aspects—is being undertaken to enhance the U.S. position in the international and domestic marketplaces.

This "Competitive Assessment" program was announced last month at a meeting of the National Export Expansion Council, a blue-ribbon business group that advises the Commerce Department on world trade issues.

The urgency of such an effort—an industry-Government cooperative undertaking—was spelled out by Commerce's Assistant Secretary Andrew E. Gibson in these examples:

The total productivity of the United States increased by 10 percent in the last half of the decade of the 1960s, while that of Western Europe went up by 40 to 50 percent, and Japan's by 90 percent.

"We know some of the factors which affect productivity—for example, Japan's spectacular growth is fueled by the plow-back of nearly 40 percent of her GNP into investment," he said. "To see this expressed in terms of competitive clout, one need only compare estimated productivity figures for the new Oita plant of Japan's Nippon Steel with American productivity figures.

"Oita expects a productivity level of 2 man-hours per ton of steel production—versus the American average of 11 man-hours per ton. Add to that the wage differences—$2.50 vs. $7 and this means that Japanese labor costs per ton in this, their most modern steel plant are $5 versus our average of $77," he related.

"One question then is how have the investment policies in Japan encouraged such growth and are these policies which should be more actively pursued in our country?"

Gibson went on: "It's not a secret that many of the trading practices of our com-

petitors are less than fair to U.S. exports. Merchandise produced economically in our country, which is to say many products which normally would enjoy a comparative advantage, are not entering some foreign markets because of discriminatory practices."

He said these include farm products, which face formidable barriers in the Common Market, and also advanced technology items, such as computers, which are excluded by the procurement practices of many foreign governments.

The Domestic and International Business area in the Commerce Department (DIB) will document these practices and attempt to assess their impact on competitiveness—with a view toward possible future multilateral negotiations.

The U.S. is competing with products from some countries that have vigorous policies to develop modern industries and keep export prices low—sometimes with subsidies and tax rebates. DIB specialists will examine the impact of such policies and the impact of U.S. tax policies on competitiveness.

Examinations which have compared U.S. research expenditures with those of the European Economic Community and Japan indicate that the latter countries are allocating more attention to specific industries or product developments than the United States does.

For example, Gibson noted, Japan is pushing full speed ahead on electric cars and nuclear fusion. The U.S., he said, must assess the possible impact of these targeted R&D efforts on its competitive position in these areas.

Competitors stress promotion

Then there is the impact of the various export enhancement practices abroad. An examination of the export promotion budgets for industrial goods of Japan, the United Kingdom, France and Italy shows, Gibson said, "our outlays, as a proportion of manufactured goods exports, are dramatically less."

To take a specific case, the U.S. ratio is less than one fourth that of the United Kingdom. "We need to know what kinds of elements exist in our competitors' export environments and the impact they are having on our competitiveness," he commented.

"As a result of our assessment of the factors of influencing the U.S. competitive positions in world trade, we will be recommending or, when possible, implementing Government action needed in these areas. Some of the solutions may not digest as easily as others," Gibson warned.

WORLD TRADE REVIEWED—*Secretary Peterson gave the NEEC members an overview of current U.S. trade policies, with special emphasis on East-West trade prospects.*

"Hard-nosed negotiation for removal or lowering of trade barriers, countervailing import restraints, and investment tax credits are popular causes: But pushing for management-labor cooperation in productivity increases, and wage-price measures to hold down domestic inflation to enable us to compete are nowhere near as attractive—and are much more difficult. The key issue must remain the growth and health of the total economy."

Another part of the competitive assessment program is furnishing a steady flow of information to U.S. business and society. Secretary of Commerce Peter G. Peterson told the group that one of his department's current goals is to derive more practical and useful information for U.S. business, through informed analysis, out of the wealth of statistics gathered by the Federal Government.

Also, tracing an outline of current U.S. trade policies, he listed three major objectives: 1) to help industry create new products through better research-and-development links with governmental programs; 2) to help place these products into world markets competitively by raising U.S. productivity levels; and 3) to help find new markets for all U.S. products, including those in the

EXPORT EXPANSION LEADERS—*Elmer C. Winters (left), of Lander, Wyo., and Gerald S. Wise, of Baltimore, are chairmen of the Regional Export Expansion Councils in their areas.*

countries of Eastern Europe.

Secretary Peterson said that the international aim of the Administration's New Economic Policy is to build an "equilibrium" among the major trading nations. He commented at length on current trade negotiations with the Soviet Union, and emphasized that the Administration was seeking a "comprehensive agreement" that would anticipate and help avoid later problems (see *Commerce Today*, Sept. 4, Page 15).

At the NEEC luncheon session, Secretary Peterson presented "E" for export excellence awards to 14 U.S. enterprises. Among these were the 1000th "E" and the 100th "E Star" awards, the latter a repeat honor for continued excellence in overseas sales (see story on Page 35).

DISC progress reviewed

A reading on the progress of the Domestic International Sales Corporation (DISC) tax deferral program for exporters was offered by Under Secretary of the Treasury Edwin S. Cohen. He said that 2,915 enterprises had elected to form DISCs by Sept. 1, and that a sampling of the names indicated that the parent DISC firms covered a spectrum of U.S. industry from tiny businesses to the giants of the American commercial scene. The real story of DISC effectiveness in increasing U.S. exports will not be known, however, until the corporate tax returns for the 1972 year are in, he commented.

A spokesman for the business community, Charles F. Rice of the Monsanto Co., declared that early reports were underscoring the popularity of the DISC program.

Three NEEC industry advisory committees submitted reports at the meeting.

The committee on telecommunications recommended a study of how to build a stronger export base in that industry, possibly through the creation of a unified export company representing U.S. interests. It also suggested a tax incentive program to offset research and development costs, and urged the adoption of barter or soft currency exchange plans to assist in East-West trading.

The chemicals committee urged the easing of U.S. curbs on overseas investment, liberalizing of inter-company pricing rules, a vigorous effort to combat nontariff barriers worldwide, improved shipping rates and more stability in the shipping field, and international efforts to align antitrust regulations.

Similar recommendations

The office machines and computer committee made recommendations along most of these same lines. It also asked for a strengthening of U.S. Government commercial services abroad, and urged that Most-Favored-Nation tariff treatment be granted to all Eastern European nations.

All three committees emphasized the need for further actions in the export credit field, and all asked that the U.S. work to insure better international product standards.

Other speakers at the meeting were Peter M. Flanigan, Executive Director of the White House Council on International Economic Policy, who addressed a dinner session, and Robert L. McNeill of the Emergency Committee for American Trade, who discussed the role of American multinational companies in the world economy.

LISTENING TO REPORTS—*Paul A. Amundsen (left), Executive Director of the American Association of Port Authorities, Washington, and Lester P. Aurbach, Industrial Publishing Co., Cleveland, were among the NEEC participants.*

Food Industry Sees Itself In Major Role If U.S. Goes Metric

Benefits, Costs Involved Hard To Project But Grocery Conversion Should Come Early

(With this article, Commerce Today *begins a series on the impact expected on various industries should the nation eventually convert its present measurement system to metric. The articles are excerpted from papers prepared for the recent University of California conference on "Impact of Metric Changeover on Packaging and Allied Industries" at San Francisco. This first one is based upon a paper prepared by Gordon A. Goodrich, Vice President for Operations, General Foods Corp., White Plains, N.Y. Others will appear in succeeding issues.)*

Metric terminology is the technical measurement language used in most food development and research laboratory work today. There is a translation into conventional non-metric units as the process leaves research development and approaches commercial plant production. Grams and milliliters are converted into ounces, pounds, and gallons for plant use and packaging for consumer distribution.

Implications of metrication for the food processing and packaging industry are confined primarily to two areas: one is the impact in converting manufacturing process facilities, and secondly, the possible change in sizes of packaged products.

In considering metrication of food packages, there are basically two types of conversion. The first is quite simple and is adopted by merely substituting metric measurement units for the non-metric measures now in use. An example would be for food packagers to print the metric weight in grams on present size packages instead of ounces and pounds.

The second type of conversion involves resizing things in standardized metric modules. These are related, preferred number sizes developed as a geometric progression and called the Reynaud, or "R" series.

To examine the possible courses of action in adopting metrication, look at the consumer packaging of milk.

Milk is now sold by the quart. The quart becomes an obsolete measurement unit and will be replaced by the liter. A minimum conversion consists of relabeling the current container to show the equivalent liter volume. A quart is .946 liter, therefore the carton will show a label volume of .946 liter or 946 milliliters.

Because of the unwieldy fractional liter quantity, this type of conversion may be objectionable and not understood by the consumer. A more likely conversion will resize the quart container to hold a full liter quantity. This results in a 5 percent increase in container size.

Nutritionists pleased

Milk consumption conceivably can increase in this 5 percent amount at the consumer level, as the housewife will continue to purchase the same number of containers. Also, the popular one-half pint container used in school lunch programs will contain one-quarter of a liter, again 5 percent more than the non-metric pack. Nutritionists are pleased with this development.

The changeover to metric liter packs is quite simple, as most packing equipment is easily adjustable to accommodate the 5 percent larger carton. There will be a cost issue as a result of the larger container and increased quantity of milk.

Metric conversion for packaging other dry grocery products follow a similar analysis.

Using ground coffee can sizes as an example, the present 1-pound, 2- and 3-pound sizes have their metric equivalent of 453, 907 and 1359 grams. These gram weights are currently printed on the side or back panel of the can by many manufacturers.

Again, minimum metric conversion consists of relabeling to show the same gram weights as the predominant label weight. However, because of the odd numbers of grams, this type of conversion most likely will not be acceptable and will necessitate resizing to even metric modules. The 1-pound, 453-gram pack would increase to 500 grams; the 2-pound to 1000 grams or 1 kilo. The 3-pound would become 1500 grams or 1½ kilo. These sizes are roughly 10 percent greater than current packs.

Marketing considerations for individual products will determine the actual metric package weight and whether it should be larger or smaller than the equivalent current package size. New metric packages should provide a meaningful range for a small, medium or large size for a particular product.

A different series of metric package sizes has been adopted in Great Britain. They have established package size steps of 50 gm., 125, 250, 375, 500, 750 and 1000 gms., or 1 kilogram. The British package size increment is 125 gm.

There is a feeling the American housewife will adjust to metrication in the grocery store more rapidly and be more comfortable with package sizes based on the one-tenth of a kilogram increment rather than the one-eighth increment proposed by the British.

This can facilitate price comparison shopping and unit pricing in the supermarket. Also there is the factor that a very low level of understanding exists by the average adult consumer in comprehending what the metric system is all about. One point generally believed is that metrics are considered simpler because they are related to the base 10 and its multiples.

The wisdom in ignoring this public understanding in selecting another basis for incremental package sizes could be questioned.

Metrication of package sizes is minimal for those grocery products processed and packaged for reconstitution in the kitchen to a given volume or number of table servings, such as main meal dishes, dessert mixes, drink mixes, and cake mixes. With these products, the consumer is not desirous to purchase appreciably different product yields as a result of metrication. Therefore, for simplification and uniformity, this group of products might be packed to the nearest 5 or 10 gram weight.

Complicating factor

There is a complicating factor for products reconstituted with a cup of water or milk. The current customary cup contains 237 milliliters while the metric cup is ¼ of a liter and contains 250 milliliters, an increase of about 6 percent. This will present a problem to food processors during a transition period to assure proper product performance in the event a housewife happened to use a non-metric cup measurement with a metricated product.

The impact in converting food processing plants and factories to accommodate metrics is largely the expense for resizing packaging equipment. Changes will also be required in the process areas. Scales and batching equip-

ment must be modified to provide kilogram or liter measurements. Pressure and temperature instruments will require metric unit dials. Mechanics must be furnished with metric tools. Maintenance machine shops will require modification of machine tools. However, there will not be any wholesale obsolescence or replacement of machines and plant equipment. Packaging and processing equipment have very long working lives. It is not unusual to see twenty and thirty-year old machines still operating efficiently. As conventional machines wear out, they will be replaced with metric equipment. It will be necessary to maintain dual inventories of spare parts and supplies for many years to service both types of equipment during the extended transition period.

Another change will be required to convert all administrative reports and records to metric units. Purchasing departments will be ordering in liter and kilogram quantities and cost reports will be related to metric units of production.

The total cost of conversion will vary from company to company. Certainly the cost to resize all packages is very significant as a majority of printing plates and artwork must be replaced to match new package size requirements. It is extremely important for any metric conversion timetable relating to the grocery products industry to be of sufficient length so a panic crunch does not take place in the printing and carton converting industry. A well planned conversion program can minimize costs to food processors and convertors.

The food processing industry has very little to gain economically from a national program to convert to the metric system of measurement.

Exports are of relatively little significance in the total dollar volume for processed grocery products. However, the food industry can provide an important educational bridge in the total national program.

Metric measurement is a way of thinking. The consumer must be exposed to essentially a total metric environment if there is to be a meaningful conversion. This does present problems for the adult generation, but assimilation and adaption can evolve if the program is properly executed. The grocery products segment of the economy can play an important educational role and therefore will probably have an early priority for conversion in the master timetable.

CHANGING THE PACKAGE—*It is believed the American housewife will adjust to metrication in the grocery store more rapidly and be more comfortable with package sizes based on the one tenth of a kilogram increment, according to a General Foods Corp. executive. He finds the changeover essential to U.S.*

A metric conversion program to make the metric system of measurement the predominant measurement language in the United States is in keeping with the total worldwide acceptance and use of metrics. To deny future generations of Americans the ability to communicate with the world in common technical measurement terms would be a tragedy.

The benefits, costs, and hardships for a conversion program are difficult to accurately project. The experience in Great Britain thus far indicates the actual costs of conversion to be significantly less than initial estimates. Americans are a resourceful people and will no doubt find ways to minimize both cost and inconvenience of any metric transition program.

The problems of conversion are monstrous in total, but solvable if properly planned and executed. The food industry can fulfill an important role in the total metrication program.

U.S. Maps Campaign On Abandoned Cars

Scrap Processors Contend Chief Obstacle To Clearing Up Old Automobiles Is Economic

Imagine the beauty of the United States landscape ten years from today—with between 30 to 35 million abandoned and obsolete cars despoiling countrysides, cluttering city streets, climbing skyward in auto graveyards.

The Institute of Scrap Iron and Steel, Inc., in pointing out the enormity of junk car problems, emphasizes that "old cars, unlike old soldiers, do not just 'fade away'."

Currently, the Automobile Manufacturers Association estimates there are as many as 20 million of these rusty hulks ready for recycling.

One million per year

Added to this number will be another one million cars which will go out of service this year, but which will not find their way into automotive dismantling and scrap processing industries.

A study done by the Salt Lake City Metallurgy Research Center of the Interior Department's Bureau of Mines shows that the average American car manufactured between 1954 and 1965 produces about $56 worth of marketable ferrous and nonferrous scrap metal.

This means that this roadblock of more than 20 million cars represents more than $1 billion of reusable metal. Then why is this stockpile growing instead of being reclaimed for recyclable material?

ISIS lists three prime answers:

- *Cost*—It takes $51 worth of processing to retrieve that $56 worth of metal per car—a narrow profit margin that can disappear quickly if the car has been stripped of its radiator, engine or transmission.
- *Transportation*—The cost of transporting obsolete autos to the scrap processing plant can be prohibitive (in terms of profit margin). Also the processed scrap is subject to much higher railroad freight than the pig iron with which it competes.
- *Marketing*—Changing technology has reduced the steelmaker's need for automotive scrap, which means processors and brokers are operating in a marketplace where the buyer tends to set the prices.

The National Commission on Materials Policy is also focusing on this problem. The

CAR SCRAPS—*This mountain of steel fragments is the remains of 30,000 old automobiles which have been processed for remelting, by steel mills and foundries, into useable metal.*

Commission was created by Congress under Title II of the Resource Recovery Act of 1970 to study adequacy of materials supply with specific instructions to investigate recommended means for the "extraction, development, and use of materials which are susceptible to recycling, reuse or self destruction in order to enhance environmental quality and conserve materials."

Chief obstacle

Dr. James Boyd, executive director of the Commission (of which Secretary Peterson is a member), points out that the chief obstacle to solving the abandoned and obsolete car problem is an economic one—not a technical one.

Boyd notes that the drop in consumer demand from steel mills and foundries has created a surplus of processed scrap.

The Commission director does explain that in some cases this drop in prices has been partially offset by exports to foreign markets, but not enough.

The automobile junk car problem is only one of many besetting the industry and the entire country today. Solid waste is growing in tonnage everyday. In fact, M. J. Mighdoll, executive vice president of the National Association of Secondary Material Industries Inc., which includes nonferrous and other scrap material processors has stated "recycling has to be the most constructive response that has been developed to answer the challenge of environmental management, to cope with the mounting piles of solid waste building at the rate of more than 300 million tons each year in the United States."

To tackle the problems and to listen to advice and recommendations from both industry and government officials on how to solve the rising tide of metal scrap—an overwhelming percentage of which is presently finding its way to open dumps—the Commerce Department called a meeting of its Industry Advisory Committee on Iron and Steel Scrap Problems late this summer.

The problems of the entire scrap industry were reviewed at this meeting The Commerce Department has not arrived at a position on scrap metal recycling and the views of the scrap metal processors do not reflect the views of the Commerce Department. Investigation and research has not yet been completed or fully appraised.

James M. Owens, chairman of this 25-member committee and director of the Metals and Minerals Division in the Department's Bureau of Domestic Commerce, said that as a result of this three–hour meeting, special attention is to be given to junked car disposal sites, automotive tire disposal and the economic and technological aspects of scrap metal research and development by both industry and government.

Other areas discussed by the committee and government spokesmen included a number of environmental concerns, solid waste legislation and regulation, export-import policy, a need for improved intra-governmental

coordination and government-industry cooperation in solving scrap metal problems, transportation costs, and the desirability of a centralized source of recycling information. has appointed subcommittees to study junk car disposal sites and the economic and technological aspects of scrap metal research and development as well as automotive tire disposal.

Owens appointed to the junk car disposal subcommittee Wilbur Cohen, president, Cohen Brothers, Inc., Charles T. Cudlip, industry relations manager, Ford Motor Co., and Mrs. Lillian Jero, secretary-treasurer, Wally's Auto, Inc. Appointments to the other subcommittee will be announced in the near future.

Committee's opinion

In general, the consensus of opinion of the Industry Advisory Committee spokesmen is that the biggest problem faced by the iron and steel scrap collecting and processing industries today is an economic one—the demand for the recyclable material produced by the scrap processors is rapidly dropping, causing the processor to buy less scrap. As a result, the abandoned cars, refrigerators, washing machines, stoves, steel cans and other metal discarded products either litter the countryside or find their way to landfills and open dumps at an increasingly alarming rate.

The scrap cycle has obviously broken down and needs to be started up again. Improved economics will change this.

There are several reasons for the breakdown. In the case of the steel mills which historically have used large quantities of scrap in the manufacture of their new commodities, the ratio of virgin iron ore to ferrous scrap used in the making of steel, has been changing in favor of the virgin resource but will change more as larger electric furnaces are installed.

Fred Berman, president of the Scrap Metal Research and Education Foundation (the research arm of ISIS and the Environmental Protection Agency's Office of Solid Waste Management Programs) recently said that ten years ago nearly 90 percent of all steel produced was melted in open-hearth furnaces, utilizing a scrap charge of about 40 to 45 percent.

"Today, however," he commented, "the major steel producing furnace is a basic oxygen furnace that uses a 30 percent scrap charge, most of which is home scrap (material generated in steelmaking process)."

"On a ton-to-ton basis, this has reduced purchased scrap by more than 30 percent based on current charging practices."

Berman did point out that there are some saving factors, the emergence of the electric arc furnace in steel technology is one, since this furnace uses an almost 100 percent scrap charge. Another is the potential displayed by the increased use of continuous casting by steel mills, which, because of increased yields, cuts back on the amount of home scrap that is generated.

BURIED IN GARBAGE—*Cars are only one of the scrap metal industry's and environment's problems. Cans are another. This mountain is waiting for reclamation and reprocessing.*

Major factor

Another contributing factor is that the major consumers of ferrous scrap are not showing the same growth rate as other manufacturing industries. The purchases of imported steel by steel consumers and the use of other competitive materials in manufacturing in place of steel have both meant less orders for the steelmakers and hence less manufacture of the product. One bright light here, however, is the beginning of the recovery for the steel industry in the United States today.

Perhaps one of the greatest arguments against the use of more recycled iron and steel by manufacturers is its cost. A recent study conducted for ISIS reports that today

it costs $4.21 more to produce a ton of steel using purchased scrap as the raw material.

Other problems which plague the ferrous scrap processing industry are the quality of the scrap from solid waste, the increased cost of reclaiming ferrous solid waste, and the lack of public awareness of the scrap processor's role in economic recycling, causing the scrap processor to be bypassed in environmental decision making.

The automobile dismantling industry, whose primary function is the salvaging and sale of useable parts from retired automobiles, sells the auto hulks to the scrap processors. Their stockpile of auto hulks may be their working inventory.

Recycling centers

Recycling centers, the industry maintains, are, in fact, not recycling centers but collection centers that are only increasing the mound of solid ferrous waste for which no market has been obtained.

Dr. Herschel Cutler, executive director of ISIS, projects that "unless the steel industry states not only that it will buy the output of municipal recycling centers, but that it will buy more scrap iron in total, the lack of market problems will remain.

He warned that tin cans might move to the mill, but that the presently recycled autos, refrigerators and fire machinery might pile up and eventually be confined to the same landfill or dump that previously was receiving the tin cans.

The industry did note, however, that it did not include in their definition of government recycling centers the volunteer centers that have been springing up across the country for the disposal of used ferrous metal.

Mighdoll, of NASMI, stressing the need for change, said that the obstacles that presently are cutting back scrap processing need to be eliminated. He adds his warning that "present industrial habits, government policies, public apathy, prejudicial and discriminatory regulations put the nation on a path of virgin material preference and direct it away from economically-viable recycling."

What then needs to be done? Eli Viener, partner of Hyman Viener and Sons, as the industry spokesman for NASMI, at the Commerce Department's Advisory Committee meeting offered the following suggestions:

- "We need tax legislation that will offer tax incentives for users of recycled materials and that will thus balance the depletion allowances being granted to producers of primary metals and ores. One such tax bill has recently been introduced in Congress.
- "We need freight rate equalization—so that recycled materials can compete with primary materials. That means that current freight rates must be changed since they discriminate against scrap. Efforts are now being made to develop legislation along this line.
- "We need procurement policies by the federal government and by state government that will encourage the purchase of products made with recycled material.
- "We need greater encouragement for exports, which means an end to restrictions, quotas, etcetera, so that U.S. scrap suppliers can compete in the foreign marketplace.
- "We need a change in current zoning, licening, fencing laws in municipalities and in cities which discriminate against the scrap processor and, in some cases, force him out of business.
- "We need greater industry-government cooperation in solving such problems as air pollution, occupational safety hazard regula-

CAR GRAVEYARD — *This photo of Bethlehem Steel's shows junk cars, stripped of their valuables, stacked high in a car graveyard where they await processing. The steel industry has nothing to do with preparing the scrap. Scrap dealers carry through this process.*

BALES OF SCRAP—*This metal will be reused in a useful way someday. It has been through the first stages of reclamation and reprocessing that will preserve existing primary resources and make use of what otherwise would be an eyesore.*

tions and other problems of the industry."

Viener pointed out that recycling today is more than just a slogan—"it represents," he said, "the means of conserving our dwindling raw material supply and of solving the solid waste problem."

The situation is not totally depressing. An important first step was taken toward solving the problem, when President Nixon in a recent environmental message stressed the need to recycle solid waste material back into the economy.

Industry and government are cooperating on finding the solutions to the various problems infecting the industry and breaking down the scrap cycle . . . for a material cannot be said to be recycled until it has actually been remelted.

Charles B. Kenahan, chief of the Division of Solid Waste of the U.S. Bureau of Mines, has reported on several programs being undertaken by the Interior Department—junk auto-railroad car incinerator development, increased use of ferrous scrap in steelmaking, production of foundry pig iron from junk cars and other ferrous scrap, the recovery of copper and iron from copper bearing ferrous scrap, and the separation and recovery of metals from urban refuse are a few.

Congress lends hand

Congress is helping too—and several bills are being written or studied now to help in the reclamation of metals.

Owens, who is also assistant staff director for industry and labor liaison for the National Commission on Materials Policy said that the commission was giving special emphasis to the recovery of ferrous scrap as an important part of the material needs of the country. This is being closely studied for recommendations to be included in the report to be given to the President in June 1973.

"With the depletion of our natural resources, conservation of these materials can be accomplished by increased use of scrap metal," he said. "And a further attraction is the contribution made to the enhancement of the environment by the use of recycled materials in manufacture . . . eliminating many unsightly landmarks."

In fact, solving the major problem now being experienced by the secondary metals industry can help lead to the economic and social benefit of a cleaner environment, the conservation of natural resources and a ance of trade.—*BDC*

REPROCESSING—*The superintendent of the electric furnace department of Bethlehem Steel's Los Angeles plant is shown looking over scraps ready to be recycled into useable metal.*

Growth Vs. Environment: Must They Conflict? Recent Study Says No

Arizona Trade-Off Model Designed To Enable Planners To Assess Projects' Total Impact

What can a State do to bring future economic growth to a region of the United States still largely unspoiled by man and yet preserve the environment which makes it unique in the Nation?

Arizona, a member of the Four Corners Regional Commission is tackling this problem through the development of a sophisticated model which will permit the State's decision-makers to examine the trade-offs between economic development and the environment.

The Arizona project, commonly known as the Arizona Trade-Off Model, or ATOM, is being developed by Batelle Columbus Laboratories under a contract with Arizona's Department of Economic Planning and Development. It is being financed by grants from Commerce's Office of Regional Economic Coordination and the Four Corners Regional Commission.

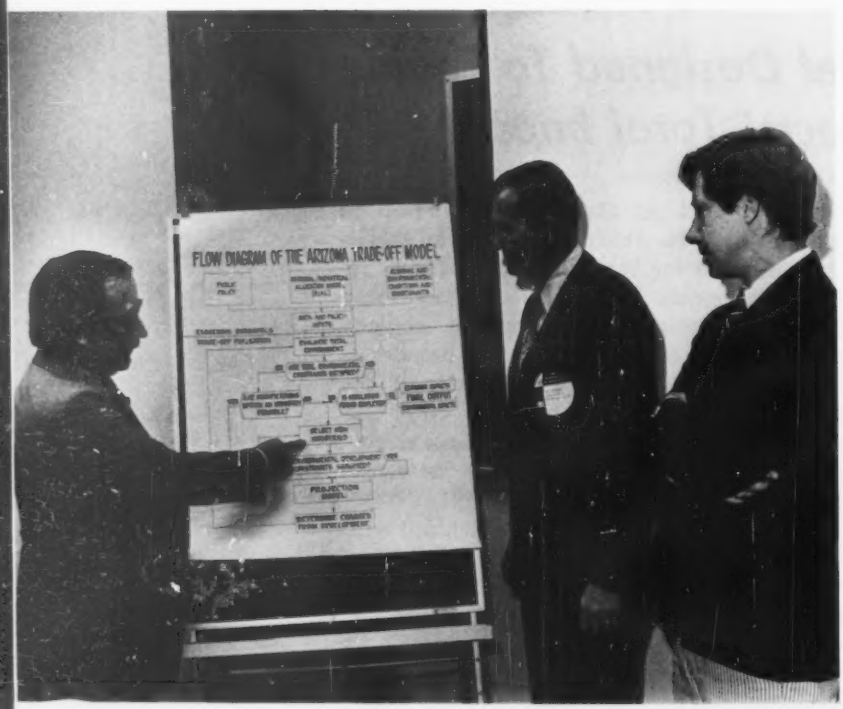
In submitting its proposal to the Commission and the Commerce Department the States pointed out that "Several conditions exist in Arizona which makes this an opportune location for the type of innovative research program proposed here. The rapid growth of the population and the economy of the state during the past two decades is an important factor. The magnitude of the changes which have occurred in both economic and physical conditions enhance the opportunity to discern and analyze the causal relationships."

In Arizona, as in other areas included with the regional commission program, the pervasive issue of environmental quality is matched by problems of income and employment opportunities. Studies have been made of the environment and others made of the economy and its potential, but no usable model had been developed for the systematic evaluation of alternative program and investment decisions in terms of their joint impact upon the economy and the natural environment.

The project, which is strongly supported by Arizona Governor Jack Williams, has been underway since November 1971 and the model is scheduled to be operable by the end of 1972. The project is monitored by a special Review Committee consisting of representatives of Commerce's Office of Regional Coordination, the Four Corners Commission, the Office of the Governor, the State Legislature, and personnel from State Universities and executive departments concerned with economic development or environmental considerations.

Acceptable balance

Governor Williams has said of the project, "I am impressed with the prospects of this study and the manner in which it may help us in our search for better environmental quality while at the same time satisfying the requirements of economic growth. Maintaining an acceptable balance between the two is a real challenge. The research team has a great responsibility and an opportunity to perform outstanding service to the State of Arizona and the field of environmental quality."



STUDYING PLAN — *Charles Nurishall (left), of Batelle, discusses chart with Hawley Atkinson (Center), special assistant to Gov. Jack Williams of Arizona, and Boyd Gibbons, Council on Environmental Quality.*

The economic development component of the model is based on a modification of the Four Corners Regional Industrial Allocation (RIAL) model developed by Batelle for the Four Corners Commission. This component will permit the analysis of potential economic development by industry and location and, conversely, location as a potential for differing types of industry.

The State is divided into a series of 6 by 10 mile cells for purposes of the analysis. The size of Arizona counties is too great to permit them to be used as a basis for analysis of industrial location potential. The cells also permit "fine-tuning" of the model. The City of Phoenix, for example, includes parts of at least eight such cells. Suitability of various parts of the county or community can, therefore, be analyzed.

Environmental impacts are measured by ATOM in terms of absolute physical/chemical standards, such as the amount of a pollutant in the air or water, and by land-use characteristics. The model is being designed so as to account for cumulative effects on the environment and the effect of activity in one cell or adjacent cells.

ATOM will focus on economic and demographic growth, and environmental quality. Economic growth will be measured in terms of changes in employment by industry, changes in the size of the labor force, and unemployment rates.

Demographic growth will be measured by both migration and natural increase. Evaluation of environmental quality will be generated through application of measures of ecology, pollution, aesthetics and level of human interest.

Difficult to establish

Not unexpectedly, measures of environmental quality proved most difficult to establish. Measurable physical-chemical factors can be readily identified, such as allowable levels of pollutants which can be passed into the environment. Not so with other categories. The model will convert categories of ecology, aesthetics and human interest into land-use factors. They will then be implemented in the model as constraints on the type of and extent of land use to be allowed in a particular location in Arizona.

The environment is evaluated on the basis of the six-by-ten mile grids. Each such sixty square-mile cell is described first in terms of its major surface features. Eleven classifica-

tions can be used in this set of descriptors including such characteristics as water, cultivated land, coniferous forest, grassland and mountain brush.

The second feature represents human activities on a current demand basis or on the basis of estimated future demand. Human activities include such factors as urban settlement, recreational activity, and mining. The third feature represents such things as land ownership, mineral deposits, types of wildlife and their habitats.

In terms of economic development, the model evaluates the feasibility of specific industries locating in any given area on the basis of the characteristics of that area. The ranked listing becomes an input to the evaluation of potential economic growth and alternatives. The obverse of this part of the overall model is the ability to sort out feasible locations for any given industry. In both cases environmental impacts of the development can be assessed.

Model assumption

ATOM is based on the assumption that possible conflicts between economic and environmental goals are not necessarily irresolvable. The model is structured in such a way as to assist the decision-maker to evaluate trade-offs but it also can be used to help devise programs which will achieve both a satisfactory rate of economic growth and an acceptable improvement in the quality of the environment.

The project was explained to Federal officials from the Department of the Interior, the National Science Foundation, Council on Environmental Quality, and the Environmental Protection Agency as well as the members of the Arizona Congressional delegation at a briefing on September 18. The presentation was led by Hawley Atkinson, Special Assistant to Governor Jack Williams and his Alternate on the Four Corners Regional Commission. Other participants in the briefing included Stan Womer, Federal Cochairman of the Four Corners Regional Commission, Robert E. Ruddy, Special Assistant to the Secretary of Commerce for Regional Economic Coordination, members of the Arizona Department of Economic Planning and Economic Development and Charles Minshall of Batelle.

The Four Corners Regional Commission is one of six organized under Title V of the Public Works and Economic Development Act. The other five are the New England, Coastal Plains, Ozarks, Upper Great Lakes and the Old West Regional Commissions. The Old West Commission, the latest to be organized includes the States of Montana, Nebraska, North Dakota, South Dakota and Wyoming.

COCHAIRMEN — *Other developers and regional commissions may draw from the Arizona project. Robert E. Ruddy (standing), Special Assistant to the Secretary for Regional Coordination, is shown discussing the study with Robert McCaughey (left), federal cochairman, Old West and Stan Worner, federal cochairman, Four Corners.*

ENVIRONMENT STUDIED—*Boyd Gibbons (left), of the Council on Environmental Quality and Robert E. Ruddy discuss environmental considerations.*

DOMESTIC BUSINESS REPORT

- Banks open purse strings to minorities
- Postage stamps will cost same
- Shipyard hiring outlook bright
- Community projects create jobs
- Lumber prices subject of hearing

Banks Open Purse Strings To Minorities

The commercial banking industry has reported a 37 percent increase in minority business loans by big-city banks during 1971.

The American Bankers Association (ABA) released statistics showing that 305 major metropolitan banks lent more than $251 million last year to minority businesses.

This put the industry ahead of the rate necessary to achieve a five-year, $1 billion minority lending goal by the end of 1975. The goal was first announced by the ABA on April 30, 1970. During the first two years of the period, minority business loans have totaled $411 million.

An ABA survey of the 305 banks showed that $251,400,000 was lent to 11,555 minority businesses during 1971, a 37 percent increase over the $159,700,000 lent to 9,529 minority businesses during 1970.

Walter E. Hoadley, chairman of the ABA's Urban and Community Affairs Committee, said he was "cautiously optimistic" about the latest tabulations.

Expanding capacity

"The increases indicate the expanding capacity of the minority business communities throughout the nation, as well as the willingness of the banking industry to pursue minority business lending. In fact we have every reason to believe the industry's total commitment is even larger since these statistics represent only those banks which actively participated in the survey," said Hoadley, who is executive vice president of the Bank of America.

The average size of these loans has increased from $16,750 to $21,750. Hoadley suggested that the increase "reflects the growing business sophistication within the minority business community, as well as its ability to put together larger proposals.

"Bankers seek these larger loans, too, for they generate more economic benefits for the community in which the business is located," he added.

On the negative side, the data shows an increase in the amount of net charge-offs on loans previously made.

"These statistics," Hoadley said, "reflect some of the lessons bank officials have learned during the past few years of special emphasis on minority business lending.

"When many of these programs began, they were vigorously pursued and the special risks involved

were often discounted. As we've gained experience," he said, "bankers have learned to become more selected and willing to say 'no.' A well meaning effort that ends in failure doesn't benefit the entrepreneur, the community or the bank.

Still problems

"There are still significant problems facing the minority businessman," Hoadley continued. "More management assistance is vital. A broadened supply of equity capital for minority businessmen is required. And improved access to markets within the mainstream of the economy is critical for continued growth of minority businesses.

"As we continue to encourage minority business lending we can build on our own experience. For example, we are now in the process of assembling specific information based on these experiences which will be helpful to both the borrower and the lender," he added.

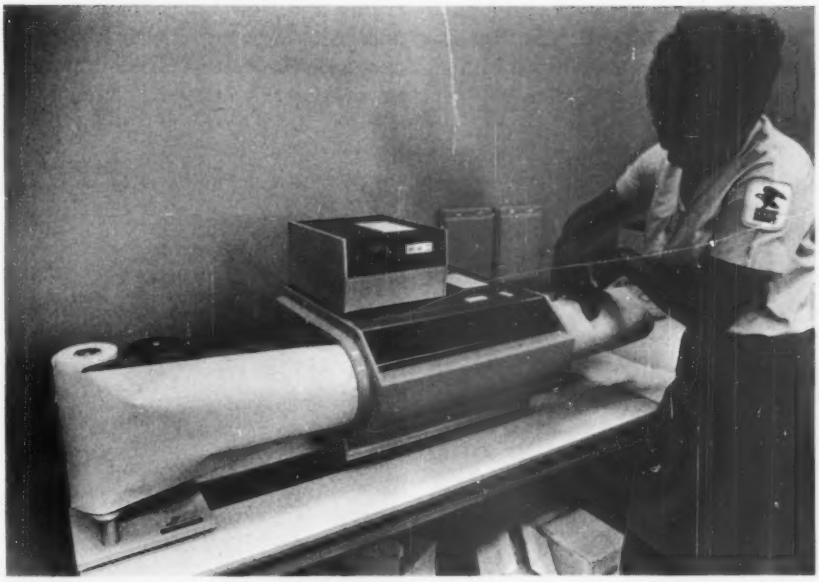
To assist its member banks in reaching the $1 billion goal, the ABA's Urban and Community Affairs Committee has instituted several programs.

Its "Key Cities" program brings involved bankers from across the nation into a city to encourage chief executive officers from that city's banks, and their lending officers, to expand their minority business lending efforts.

Special minority lending classes for the ABA's several commercial lending schools and workshops have also been implemented, and a continuing program of close relations with the involved government agencies has been worked out.

Additionally so that banks might measure their progress more effectively the ABA sought, and received, an opinion from the U.S. Commission on Civil Rights declaring permissable a bank's right to code commercial loans on a racial basis for purposes of assembling information.

—OMBE



MODERNIZATION—*Using the latest in data communication equipment the U.S. Postal Service is taking steps to improve service while holding postal rates at the same as last year. The post office's modernization plan is expected to move the mail at a faster, more efficient pace, and minimum cost to consumers.*

Postage Stamps Will Cost Same Next Year, Services To Improve

Cost control steps taken by the U.S. Postal Service six months ago has placed the service in a position where the $450 million postage rate increase forecast for January 1973 is no longer necessary.

Postmaster General E. T. Klassen told mail users across the Nation late last month that the need for the increase has been eleminated by a nationwide cost control program, involving a hiring freeze and cut in postal service overhead.

The Postmaster General cited the successful efforts to avoid the January increase as one of the major accomplishments of the postal service in the 14 months since the mail service became an independent agency, responsible for operating on a self-supporting basis.

While curbing costs, Klassen said, the Postal Service has taken specific steps toward better performance for postal customers, better employment positions for postal employees and better facilities and equipment.

"The name of the postal game is service—not lip service, but actual performance that can be measured and improved as we go along," he emphasized.

Total future

Looking toward the future, the Postmaster General promised better service and better control over costs. He said that modern facilities, more machinery and good work environment, which have been made possible under the Postal Reorganization Act, will play a major role in fostering these objectives. During the next five years, the Postal Service plans to spend $6 billion on improved mail-handling machinery and facilities. By 1975 the work environment in existing facilities will be upgraded at a cost of $400 million. Approximately 10,000 facilities are expected to be upgraded, and 2,300 will be replaced by new ones.

In addition, $1 billion will be spent to improve the Postal Serv-

ice's bulk mail network, and parallel preferential mail facility expansion program, costing $4 billion is expected to be completed in six years.

The Postmaster General pointed out that "by any impartial standard of measurement, the new Postal Service has already brought dramatic improvement to postal managers and employees at all levels."

Employees' raises

As an example he noted that all Postal employees are being given pay improvements that bring them into line with the private sector.

Several programs have been instituted by the Postal Service to guarantee better service for postal customers. Klassen cited some key examples:

• *Local first class mail*—The Postal Service is now operating under a clear-cut service standard for local first class mail. In most locations it is delivering 95 percent of local mail addressed to local destinations on a next day basis. This service standard is binding on postal personnel throughout the country and must be improved.

Klassen noted that there were "soft spots" which will receive continued attention and which will be fixed as part of the goal for better service.

• *Air mail*—The Postal Service has in operation a service standard that calls for next day delivery to designated cities within 600 miles, and in some instances much greater distances, if the air mail is in the mail service's hands by 4 p.m. For all other points its target is delivery no later than second day. Test mailings show a real improvement and Klassen believes the agency is capable of achieving a 95 percent reliability rate.

• *Bulk mail and parcels*—Arrangements for better bulk mail service are beginning to show tangible results. Short-term improvements such as fast all mail trains and new truck-train feeder networks have cut one to two days over previous transit time. Planned by the Postal Service is a modern network of new facilities for bulk mail by 1975.

• *Parcel post*—Particular attention is being given to parcel post. The Postal Service has gone downhill in this area, evidenced by the fact it has lost half this business. Klassen said "we intend to be competitive and we are going to do everything we can to improve this service and get the business back."

• *Special delivery*—Special delivery service, termed by the Postmaster General as a "disgrace" for many years, will be improved. The Postal Service is now installing a nationwide improvement program, based on the use of a self-identifying plastic "speedy bag." The new system will be in use all over the country this month.

The "speedy bags" are used within the mail system to keep special delivery mail from losing its way among millions of other pieces of mail. A six-month test program "has shown a reliability rate in the high 90s," Klassen said.

• *Stamps*—Stamp buying will soon be made easier through another customer convenience program being launched by the Postal Service. The new program is called Stamp-by-Mail and will permit small purchases to be made, with payment by check, and delivery of the stamps by mail. Tests indicate this concept will be of real value to the elderly, the handicapped, and others.

"From these examples, you can see that we view our operation as the mail users' postal service," Klassen said. "We are responsive to customers' needs. We are pledged to provide courtesy, care and reliability.

"In general, the Postmaster General asserted, "all the problems we might experience as we go along can be licked, with integrity and with a willingness by everyone—from top to bottom—to recognize that mail customers expect the best possible service at the lowest possible costs."

Shipyard Hiring Outlook Bright For Blacks, Women

Black employment in major American shipyards has shown a dramatic 30 percent increase in the last three years.

And, women employed in the shipyards increased by 7 percent or 250 persons since 1969.

These trends, reflecting the changing face of America's shipbuilding industry, are shown in separate studies released by the Maritime Administration.

Citing a survey of the minority employment practices of 15 largest U.S. shipyards, Assistant Secretary of Commerce for Maritime Affairs Robert J. Blackwell said the number of black workers employed jumped from 14,430 in 1969 to 18,794 this year—an increase of 30.2 percent.

"At the same time," he added, "overall shipyard employment increased by only 3.8 percent. This clearly indicates the dedication of American shipbuilders to hiring and training qualified black workers."

In monitoring the shipyards' employment practices, the Maritime Administration is carrying out a mandate from President Nixon to insure that minority workers participate fully in the expanded shipbuilding programs being generated by the President's program to revitalize the American Merchant Marine.

The steady flow of black employees into white-collar jobs was particularly noteworthy, Blackwell pointed out. Minority employment

IN HIGH PLACES—*This worker at the Newport News Shipbuilding and Dry Dock Co. in among a number of minority group members promoted in the shipbuilding industry recently. He is shown photographing the overall construction area.*

CRAFTSWOMAN—*Francis Adakai, an American Indian, is one of a number of women in skilled crafts.*

in this category went from 878 in 1969 to 1,776 in 1972—an increase of 101 percent. Included in this job classification are engineers, managers, and administrative employees.

In the blue-collar category, the number of black employees also increased substantially, recording a 25.5 percent gain during this period—reaching 17,018 in 1972.

In surveying the employment practices of shipyards, the Maritime Administration concentrated on the 15 largest yards in the United States, which account for 60 percent of the total shipbuilding workforce in this country.

East Coast shipyards covered in the survey of blacks are Bath Iron Works, Corp., Bath, Me.; General Dynamics Corp.'s Quincy Shipbuilding Division, Quincy, Mass.; General Dynamics Corp.'s Electric Boat Division, Groton, Conn.; Seatrain Shipbuilding Corp., Brooklyn, N.Y.; Sun Shipbuilding and Drydock Co., Chester, Pa.; Bethlehem Steel Corp., Sparrows Point, Md.; Maryland Shipbuilding and Drydock Co., Baltimore, Md., and Newport News Shipbuilding and Dry Dock Co., Newport News, Va.

Gulf Coast yards surveyed include Alabama Dry Dock and Shipbuilding Co., Mobile, Ala.; Litton Industries' Ingalls Shipbuilding Division, Pascagoula, Miss.; Avondale Shipyards, Inc., New Orleans, La.; and Bethlehem Steel Corp., Beaumont, Tex.

West coast

Shipyards surveyed on the West Coast were National Steel and Shipbuilding Co., San Diego, Calif.; Todd Shipyards Corp., San Pedro, Calif.; and Lockheed Shipbuilding and Construction Co., Seattle, Wash.

The survey of women in shipbuilding, which encompasses five labor categories, shows the number of women employees in the industry at 3,750 in 1972. This is 4 percent of the major shipbuilding yards' 88,145 employees.

In the professional and technical category, which includes managers, engineers, lawyers, certified public accountants, and draftsmen, the number of women employees rose to 426—14 percent above the 373 employed in these positions in 1969.

While the number of women in the traditionally female-populated office and clerical job category decreased from 3,007 in 1969 to 2,966 in 1972, the number in skilled craft jobs expanded from 41 in 1969 to 55 in 1972—a 34 percent increase.

Semi-skilled job category experienced a 503 percent increase in the same three year period. The number of women employed in these positions grew from 32 to 193, and females participating in the unskilled job classification more than doubled, from 47 in 1969, to 110 in 1972.

"These increases are particularly significant since these jobs are the usual points of entry into the work force where skills are acquired permitting accelerated movement into higher skilled positions," Blackwell pointed out.

—*Maritime Administration*

Shifting Growth Patterns Restore Lost Population To Some States

New provisional estimates of State populations indicate that patterns of population growth that prevailed during the 1960s seem to have changed somewhat since the 1970 Census.

The Census Bureau's new provisional estimates as of July 1 of this year indicate that States that showed actual losses between 1960 and 1970 — West Virginia and North and South Dakota—are estimated to have gained at a rate not far below the national rate of growth from 1970 to 1972.

During 1970-72, West Virginia is estimated to have gained 2.1 percent (37,000 persons); North Dakota 2.3 percent (14,000); and South Dakota 1.9 percent (12,000). The report estimates the U.S. population at 208,232,000, a gain of almost five million in the 27 months between the last census and July 1, 1972, an annual growth rate of 1.1 percent per year.

No State has lost population since 1970, although the District of Columbia had a small decrease (8,000) for an annual rate of loss of 0.5 percent. A number of rural northern states which showed very slow growth rates during the 1960s grew at or above the U.S. average during 1970-72.

Another notable figure in the report is the estimate that California—which has grown at a rate at least twice the national average since 1900—gained only at a 1.2 percent rate since 1970. Even so, California led all states in absolute growth with an estimated increase of 515,000 persons.

Other large numerical gains were registered by Florida, 469,000; Texas, 452,000; Michigan, 207,000; and New Jersey, 198,000.

On a regional basis, the South and West continued to outpace the growth rate of the Nation—the Northeast is estimated to have grown at an annual rate of 0.6 percent; the North Central States, 0.8 percent; the South, 1.5 percent; and the West, 1.6 percent

The sparsely-populated Mountain States as a group increased 6.7 percent since 1970, or a rate of about 3 percent per year. For Arizona, Colorado and Nevada this was a continuation of the growth pattern of the 1960-1970 decade. But the other States in the area are estimated to be making marked increases since 1970: Montana and Wyoming, 1.6 percent per year; New Mexico, 2.2 percent; Idaho, 2.7 percent; and Utah, 2.8 percent.

In addition to the provisional July 1, 1972 estimates, the report contains revised July 1, 1971, estimates; 1970 census figures; the change from April 1, 1970, to July 1, 1972; and the percentage change for the same period for States and Regions, for both the total resident and civilian resident population.

Copies of the report, *Estimates of the Population of States: July 1, 1971 and 1972*, Advance Report, Series P-25, No. 488 are available for 5 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce Department field offices in major cities.

Women, Minorities Get Bigger Coverage In Statistical Abstract

A loose insert, "USA Statistics in Brief, 1972," and new data on the social and economic status of women and minority groups are featured in the 1972 edition of the *Statistical Abstract of the United States.*

The publication was issued last week by the Census Bureau.

The insert, included for the first time, is based on the *Abstract's* summary entitled *Recent Trends.* It contains statistical tables on population, vital data, health, education, employment and welfare, income and prices, law enforcement, government, national defense, business and finance, agriculture, communication and transportation, power and science, and foreign commerce. There are also selected data for regions and states from the 1970 census. Data in the subject tables are presented for 1960, 1965, 1969, 1970 and 1971.

Agriculture

Data from the 1969 Census of Agriculture appear for the first time.

This 93rd annual edition of "The Abstract" also includes a more comprehensive selection of statistics from the 1970 Census of Population and Housing than was possible in 1971.

There are 113 entirely new tables in the new edition. Sixteen present data on the changing conditions of women and minority groups. Others of current interest contain data on pupil transportation, adult education, defendants charged with marijuana and other drug violations, prisoners of war in Southeast Asia, military desertion and AWOL rates, voting age population, minority-owned businesses, television programming, chemicals used on farms, and unemployment rates of scientists and engineers.

Single copies of the Statistical Abstract of the U.S., 1,041 pages, are available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, or from Commerce field offices in major cities. The cost is $5.50. Additional copies of "Statistics in Brief" and "Metropolitan Area Statistics" section are also available from these sources at 10 and 35 cents each, respectively.

—Census Bureau

Community Projects, Federal Funds Create More Than 17,000 New Jobs

More than 17,000 jobs have been created in fiscal year 1972 through community development projects funded through programs of the U.S. Small Business Administration.

Kleppe reports

The exact figure is 17,356 new jobs. This figure, according to SBA Administrator Thomas S. Kleppe, represents a 36 percent increase over fiscal year 1971, bringing the total number of jobs created as a result of SBA's 502 Community Development Program to 194,000 since its inception in 1959.

In June alone, 4,201 jobs were created and employment opportunities under the program have nearly doubled since 1968.

The project maintains an additional 12,277 jobs, a 24 percent increase over the previous year, raising the total number of jobs in facilities financed 31 percent or 29,633.

The number of projects financed across the country, totalled 639—a 14 percent increase over the last fiscal year with the total cost of the projects last year increasing 43 percent to $147 million. Of this amount the development companies in these communities invested $22 million, a 34 percent increase; local banks provided nearly $70 million with SBA assistance, a 47 percent increase, and SBA provided more than $55 million in direct financing, a 43 percent increase.

Benefits shared

The benefits of the community development program were shared by socially or economically disadvantaged persons.

For instance, minorities received 138 loans (representing nearly 22 percent of the total) and were placed in 4,921 jobs (representing an increase of 1,500 over the preceding year). SBA provided close to $15 million for this program—an increase of $400,000 over fiscal year 1971.

The 502 program, so named for the section of the 1958 small business investment act authorizing the activity, provides long-term financial assistance to local development companies in the acquisition of land, construction of buildings, and purchase of equipment for small concerns that cannot obtain such financing from normal lending sources. It also creates jobs that would not otherwise exist.

The program has proven its strength in spurring local lagging economies. During June:

- In Palacios, Tex., a $575,000 project saved Dumas Seafood, the town's main industry, and the jobs of 200 peak season employees.
- In Port Gibson, Miss., an $800,000 project will open operation for Port Gibson Wood Products, creating 150 new job opportunities in a high labor surplus area.
- In Dowelltown, Tenn., a $213,000 project will permit production for P M Manufacturing Co., a shirt manufacturing plant and provide 150 new jobs in a rural area.
- In Payson, Utah, a $200,000 project enabled Western Leisure Industries to expand its pilot operation into full time production and provide 102 jobs in a rural area.
- In Lowell, Mass., a $350,000 project aided expansion of the Educator Biscuit Co.'s existing plant, creating 90 new job opportunities in an urban area.
- In Pacific, Mo., a $550,000 project, assisted in upgrading the operation of Midwest Cardboard Fabricators by replacing its existing inefficient multi-unit facilities and creating 30 jobs in a rural area.

There are other stories with similar endings. They all add up to more jobs and a better economy through SBA's 502 Community Development Program.

—*SBA*

SBA DISCUSSED—*The U.S. Small Business Administration assists the small businessman through a variety of programs. Arthur McZier, SBA's Assistant Administrator (left) is shown discussing the agency's work in Los Angeles. Others from left are John McMahon, of ABC-TV; Gilbert Montano, SBA San Francisco regional director, and Stan Lyons, host of the show.*

Job Fairs To Tour U.S. Army Bases In Europe Oct. 16-27

A series of "Job Information Fairs," cosponsored by the Department of Defense and the National Committee on Jobs for Veterans, will be conducted on a number of U.S. military bases in Europe Oct. 16-27 in support of President Nixon's special programs to assist returning servicemen.

Personnel representatives of 20 of America's major companies and associations will meet with servicemen to acquaint them with the current employment situation in the United States, to emphasize career opportunities that are available in a variety of industries, and to alert them to skills, education and training they will need to find jobs.

Asian series

A similar series was held throughout Asia last month.

James F. Oates, Jr., National Chairman of Jobs For Veterans, will open the job counseling sessions at military bases near London and Frankfurt. Oates, retired board chairman of the Equitable Life Assurance Society, has headed the Jobs for Veterans campaign since October 1970.

Companies and associations participating in the European fairs are American Hotel and Motel Association, American Telephone and Telegraph Co., Bankers Trust Co., Borden, Inc., Caterpillar Tractor Co., Cummins Engine Co., Firestone Tire and Rubber Co., General Electric Co., International Association of Chiefs of Police, Inc., International Business Machines, International Brotherhood of Teamsters, Mobil Oil Corp., National Association for the Advancement of Colored People, National Association of Home Builders, National Automobile Dealers Association, The National Institutes of Health (HEW), The Trane Co., Travelers Insurance Co., United Parcel Service, and Zerox Corp.

A number of fairs will be held at Mildenhall AB, England, Oct. 16-17, Wurzburg, Germany, Oct. 19-20; Baumholder, Germany, Oct. 24-25; and Naples, Italy, Oct. 26-27. Approximately 300 military personnel are expected to attend each of the 17 sessions.

Interagency teams, stationed in Europe and composed of counselors from the Labor Department and Veterans Administration, will attend each session to offer advice and assistance on programs and for veterans.

Servicemen and women from all four services will be provided with information on present and anticipated manpower demands in a broad range of industries and civilian occupations. The primary emphasis in these Job Information Fairs will be on giving soon to be separated servicemen counseling and information on the job market in the United States. However, it is expected that company and association representatives will have at least 9,000 job openings available for referral. *—JFV Committee*

Contour Machine Standard Completed By Working Group

The Numerical Control (NC) Committee of the International Standards Organization's (ISO) Technical Committee on Data Processing has completed work on a proposed international standard on format for contouring and contouring position machines.

Thirty members of the working group took action at its seventh international meeting Sept. 18-20 at the Commerce Department. The Bureau of Domestic Commerce's Communications Electronics Division was host to the subcommittee, which included representatives from France, Germany, Japan, Switzerland, the United Kingdom and the United States.

The subcommittee also agreed (1) on definitions for various terms used in numerical control and (2) to issue a revision of an ISO standard on codes for preparatory and miscellaneous functions for NC machines.

The subcommittee, whose next meeting is scheduled for Paris in April 1974, will continue work in defining the interface between controllers and the NC machine and areas of standardization necessary in computer-controlled machines.

Six standards

To date, six international standards on numerical control have been prepared by the subcommittee. These include standards on punched tape code and format, and axis nomenclature for numerically controlled machines. Current areas of activity are interfaces between controllers and numerically-controlled machines and computer controlled machines.

International standards in the area of numerical control of machines are necessary if such equipment developed by any one country is to be utilized in other countries without costly customizing.

Participating member countries on the subcommittee include Denmark, France, Germany, Italy, Japan, Poland, Romania, Sweden, Switzerland, United Kingdom and the United States. Observing member countries include Australia, Austria, Belgium, Bulgaria, Canada, Chile, Czechoslovakia, Finland, Hungary, Greece, Netherlands, Norway, Portugal, South Africa, and Israel.

The Electronic Industries Association TR-31 Committee on Numerical Control of Machines acts as a focal point for development of United States positions and inputs to this international committee. Active liaison and support is also provided by the Business Equipment Manufacturers Association (BEMA). *—BDC*

U. S. Lumber Prices, Nationwide Subject Of Public Hearing

An intensive investigation of lumber pricing practices will be the subject of a public hearing to be held by the Price Commission Oct. 19 at the U.S. Courthouse in Atlanta.

The hearing, Price Commission Chairman C. Jackson Grayson, Jr., said, is a followup to a Price Commission hearing and series of meetings with the lumber industry in August.

Grayson explained that as a result of a Portland, Oregon hearing and meeting with lumber manufacturers, wholesalers and retailers in Portland, San Francisco and New Orleans, the Internal Revenue Service has been requested to conduct the investigation.

Complaints checked

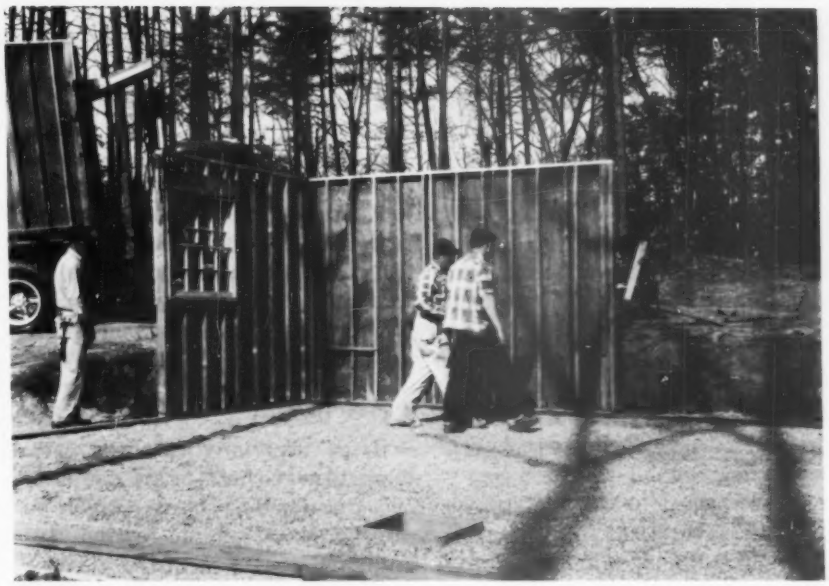
"The IRS is checking specific complaints which were brought to the attention of the commission at the meeting as well as making random audits of companies for compliance with the Price Commission's regulation," Grayson said. The Atlanta hearing will focus on:

- The efforts by manufacturers, wholesalers, and retailers of lumber to comply with the regulations, problems resulting from the regulations, changing business practices and cost pressures faced by the industry.
- The impact of log and wood products exports on the available supply and the effect on the end users, such as consumers, home builders and other wood using industries.
- The utilization of available saw mill capacity.
- The difference in structure, pricing policy and pricing history between the soft and hard wood industries.
- The problems of timber supplies, including exports, allowable timber cut on federal land and the industry's diversion practices.

Nearly every company which has annual revenues of more than 100,000 for lumber or wood products is now under price commission controls.

Persons wishing to testify should submit a written request to Otto S. Reid, Price Commission, Washington, 20508, by Oct. 10 and provide a summary of the subject matter.

In addition, the Commission requested that all other interested persons submit written suggestions and comments on the subject for Commission consideration before Oct. 19.



WOOD'S USES—*The pressure treated wood foundation walls were fabricated with windows in place and shipped ready for assembly. The wall panels were placed on treated wood mudsills resting on a level bed of gravel.*

Productivity Lag Blamed On Job Discontent

"Lagging productivity in this country is at least as much sociological as it is economic," C. Jackson Grayson, chairman of the Price Commission, has stated.

Noting that a number of "far sighted companies and unions" have been exploring ways to enhance the "quality of work" in the American workplace, Grayson asserted that these avenues of exploration are "profoundly significant to American productivity today—but particularly tomorrow."

Many businesses and unions are already deeply involved in exploring new techniques of redesigning jobs, of enriching the workday, of providing new participative ways for employees to share in the purpose of their work and become personally involved in its results.

"I share the opinion of several of our leading industrialists that if we as a Nation do not walk down that road now, the pressure of a change a decade from now may leave us behind in world competition," Grayson asserted.

"We need—and I believe we are on the brink of—noninflationary prosperity in peacetime once again," he said. "The job of government, and business and labor is to convince our citizens that it is their need, and within their grasp."

Grayson said he has created a unit at the Price Commission charged with exploring specific action now to find new socio-economic measures for increasing the American will to work.

Unit Asks Advertisers Restraint In Use Of Violence On Television

The National Business Council for Consumer Affairs, in a report released last week in Minneapolis, has asked for further voluntary restraints by advertisers and others in the use of violence in the media.

The report, "Violence and the Media," asked for voluntary restraints until the results of in depth research are known and evaluated.

In the report to Commerce Secretary Peterson, the NBCCA Advertising and Promotion Sub-Council cited the U.S. Surgeon General's report on "Television and Growing Up: The Impact of Televised Violence," and the Senate Commerce Committee's hearings on the subject and said that "there may be a link between televised violence and aggressive behavior by certain individuals in our society."

More than 100 leading business executives serve on the Council which delves into every aspect of consumer problems.

Recognizing that advertisers should not attempt to "censor" program content—particularly in areas such as news reporting, the Sub-Council declared:

"To the extent that depiction of violence in media may contribute to the encouragement of violence, those of us who bear any responsibility for media presentation must be concerned."

U.S. Surgeon General Jesse Steinfeld hailed the report as "a welcome commitment from the business community to take immediate, positive steps to significantly reduce violence in the media, especially in children's programming."

Dr. Steinfeld joined William D. Lee, executive director of the NBCCA; Robert Keith, chairman of the board, The Pillsbury Co.; and Archibald McG. Foster, chairman of the board, Ted Bates and Co., for the news conference releasing the report. Keith and Foster are chairman and cochairman of the NBCCA Sub Council.

Three points

Keith explained that the Sub-Council urged immediate adoption of a three-point program which he said "might stimulate further voluntary action to eliminate the use of gratuitous violence in the media.

The program calls for:

- the encouragement and development on an individual basis of specific policies and procedures by media, program producers, and all involved in creation and delivery of media presentations, which will "help eliminate gratuitous use of violence" and provide standards for acceptable depiction of violence, when it has material relevance to the message conveyed.
- the encouragement of advertisers and advertising agencies to establish individual policies designed to "reduce further the use of violence as an attention-getting device in any and all contexts, whether it be an attempt to win attention for an advertisement or to win audience for a program, and
- the encouragement of intensive and careful research by academicians and appropriate agencies to determine more specifically the impact of depicted violence on the media's consumers, in the realization that further work is needed to identify clearly the nature and extent of the problem.

The National Business Council for Consumer Affairs was established by President Nixon in August, 1971, to help formulate a voluntary action program by American business to aid consumers.

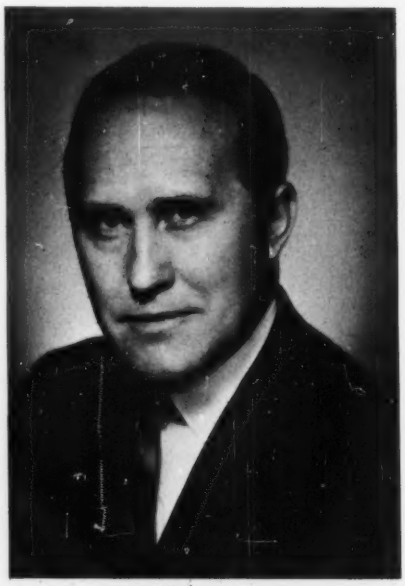
Ombudsman For Business

Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints —the Commerce Department Ombudsman for Business.

All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.

In June, the NBCCA Sub-Council on Packaging & Labeling published "Guidelines for Responsible Packaging and Labeling" which outlined a set of broad proposals within which businesses could act to better inform and better serve consumers through more effective packaging and labeling practices.

In early October, the Sub-Council on Advertising and Promotion will release two additional reports—Corporate Advertising and Promotion Policies and Procedures, and Substantiation of Advertising Claims.



William D. Lee
Executive Director
NBCCA

U.S. Cities Were In The Red By $1.7 Billion During 1971

Spending by city governments exceeded revenues by $1.7 billion during the fiscal year that ended June 30, 1971.

A new Census Bureau report shows that during that period city governments in the U.S. received $37.4 billion in revenues on everything from income taxes to municipal liquor stores. Expenditures totaled $39.1 billion.

Municipal spending

Municipal spending, other than for utility and insurance trust systems and liquor stores, came to $31.9 billion. Education costs, $5.2 billion or 16.4 percent, continued to make up the largest share of general city expenditures, compared with $4.5 billion in the previous fiscal year. The estimated sums included only the amounts spent directly by those municipalities which administer local school systems directly rather than through independent school districts.

Police protection cost $3.5 billion, or 10.9 percent of the general expenditure, which was $477 million above the previous year.

Including utilities, insurance, trust and general purpose spending, about two-thirds, or $26.3 billion, of all municipal expenditures was for current operations. Capital outlay for construction, land acquisition, and purchase or renovation of existing buildings took about one-fifth at $7.8 billion. Debt interest amounted to $1.8 billion.

Personnel costs ran to $16.4 billion, or about 42 percent of all municipal expenditures, with most going for current operations although the sum included some payments for construction work.

Revenues increased $4.7 billion, or 14 percent, over the previous fiscal year, while spending grew by $4.9 billion, also a 14 percent increase.

Of the revenue total, $30.6 billion was from general sources with the rest coming from utility and insurance trust systems and liquor stores. About half, $15.1 billion, came from city-imposed taxes, with property taxation continuing to predominate among these at $10.0 billion.

Other municipal tax monies included about $2.8 billion from either general or selective sales taxes and $2.3 billion from licenses and miscellaneous taxes.

Intergovernmental revenue of cities, including grants received through State government resources or channeled directly or indirectly from the Federal government, amounted to $9.7 billion, nearly one-third of general revenue from all sources.

Municipal indebtedness totaled $49.0 billion, about 11.9 percent more than a year earlier. The debt total included $24.0 billion in full-faith-and-credit-bonds, $18.2 billion of non-guaranteed long-term debt, and $6.8 billion in short-term debt. The latter compares with $4.9 billion in the previous fiscal year.

In addition to estimated totals for municipalities as a group, the report includes tables of statistics for individual cities of more than 50,000 population.

Minority Owned Housecleaning Firms To Organize

The National Committee on Household Employment, headquartered in Washington, D.C., has received a $175,000 one-year contract from the Commerce Department's Office of Minority Business Enterprise to form a national minority trade association of household industries.

Announcement of the contract was made by John L. Jenkins, OMBE director, and Edith Sloan, NCHE president.

The contract calls for the NCHE to develop minority-owned household cleaning businesses in Alexandria and Richmond, Va., Buffalo, N.Y., and Little Rock, Ark. to form the nucleus for the trade association. NCHE staff will work with consultants in developing standard business packages for these firms, outlining operating techniques in marketing, management, and financial policy.

By training the managers of the firms in business operating techniques, NCHE plans for the managers to counsel minority businessmen seeking to enter the household service industry.

Calendar For Businessmen

Oct. 4—Jamaica, N.Y.—Business Opportunity Federal Procurement Conference. For information, Howard S. Burns and Mrs. Helen Mirsky, Jamaica Chamber of Commerce, 89-31 161st St., Jamaica, N.Y., 11432. Phone: 212-657-4800.

Oct. 17-18 — Washington, D.C. — Business Opportunity Federal Procurement Conference to be held in conjunction with the American Logistics Association annual convention. For information, Capt. James K. Webster, Assistant to the President, American Logistics Association, 1026 17th St., N.W., Washington, D.C. 20036. Phone: 202-737-6606.

Oct. 22-26—Miami—American Association of Port Authorities annual convention.

Oct. 31 — Philadelphia — Minority Enterprise Federal Procurement Conference. For information, Luis Encinas, Office of Minority Business Enterprise, Department of Commerce, Washington, D. C., 20230. Phone: 202-967-3936.

SCIENCE & TECHNOLOGY REPORT

- Hill gets patent treaty for action
- Quarter million saved on dental bills through research
- SUMSTAT to provide easier access to federal statistics
- Consumers will pay higher prices for safer products
- Patents of special interest

Cities Sink As Water, Oil, Gas Withdrawn

Withdrawal of underground resources such as water, oil, and gas in the New Orleans and Houston-Galveston areas have resulted in rapid subsidence of the land, according to Samuel P. Hand, chief of the National Geodetic Survey's Vertical Network Division. That agency is a part of Commerce's National Oceanic and Atmospheric Administration.

Houston-Galveston has subsided as much as five feet in 20 years. New Orleans has lost more than a foot in a 25-year period.

Hand points to Terminal Island at Long Beach, Calif., as an outstanding example of large-scale subsidence. It reached more than 25 feet there before it was checked by the injection of fresh water underground to replace the oil that had been removed.

In such flat coastal areas, subsidence increases drainage problems and the danger of storm inundation. Among other areas so affected are the eastern shores of Delaware, Maryland and Virginia and the vicinity of Atlantic City, N.J.

Geodesists have compiled for the first time a crustal movement map which indicates that land in much of the country is slowly rising or falling and that very few stable areas exist.

Minute movements

The map is based on measurements made over the past 100 years by government surveyors and geodesists. Some of the movements are minute, detectable only by painstaking and repeated measurements over a period of years. But others, such as Houston-Galveston and New Orleans, are large enough to be of concern.

All subsidence is not caused by man, however. Widespread vertical movements are due to natural internal forces which are forcing the earth's crust up or down. These are referred to by geologists as tectonic movements, similar to those which scientists believe are associated with earthquakes and which formed the mountains aeons ago.

These mountain-building processes are causing the land to rise throughout the western states. Hand says the area extending westward from the Great Lakes across the northern plains may be experiencing a continued rebound from the withdrawal of the glaciers which once covered much of the area. Measurements also indicate that the southern Appalachians may be rising.

Geodetic field party measurements are related to the National Vertical Network, which is maintained by the National Geodetic

Survey. Establishment of the network was begun about 100 years ago by the Coast and Geodetic Survey, predecessor of the National Ocean Survey. The elevations are relative to each other and are referred to a common datum, or mathematical base of reference, known as the 1929 Sea Level Datum.

Since crustal movements affect the accuracy of the National Vertical Network, elevations must be periodically redetermined to provide updated information for use by engineers and surveyors. The updating process measures the amount of and rate of crustal movements.

The National Geodetic Survey also maintains a National Horizontal Network consisting of marked points whose latitude and longitude have been determined by geodetic field parties. *—NOAA*

Hill Gets Patent Treaty For Action

The President has asked the Senate for "early and favorable consideration" of the Patent Cooperation Treaty which was signed in Washington June 19, 1970. In an accompanying message, he said he would forward implementing legislation in the near future.

The treaty would simplify the filing of patent applications on the same invention in different countries by providing, among other things, centralized filing procedures and a standardized application format.

Another advantage offered by the treaty is the longer period of time available to an applicant before he must commit himself by undertaking the expenses of translation, national filing fees and prosecution in each country. Today, a 12-month priority period is provided by the Paris Convention for the Protection of Industrial Property, while under the Patent Cooperation Treaty an applicant will have generally 20 months or more. *—Patent Office*

Quarter Million Saved On Dental Bills Daily Through Lab Research

Americans now save an estimated quarter of a million dollars each day on dental bills as a result of new materials developed at Commerce's National Bureau of Standards.

The materials, called composites, match the appearance of the teeth and last longer than silicate cements, saving money on replacements. Dentists place about 34,000 composite fillings daily — about equal to the number of silicate fillings—and the use of the new materials is growing rapidly.

Today's commercially-available composites are based upon prototype materials developed at the Bureau. The benefits to patients typify 53 years of NBS contributions to progress in dentistry. The Bureau specializes in measurement and the physical sciences; its experts have skills and know-how that

DENTAL RESEARCH—*Research on the properties of materials has determined that certain surface-active agents bond to hard-tooth tissue in the presence of water, according to National Bureau of Standards scientists. Here Dr. R. L. Bowen, research associate of the American Dental Association at the Bureau, examines test tubes showing finely powdered solids suspended in the lower part of one tube and then in the upper part of the second tube after a surface-active agent is added.*

are directly applicable to the solution of dental problems.

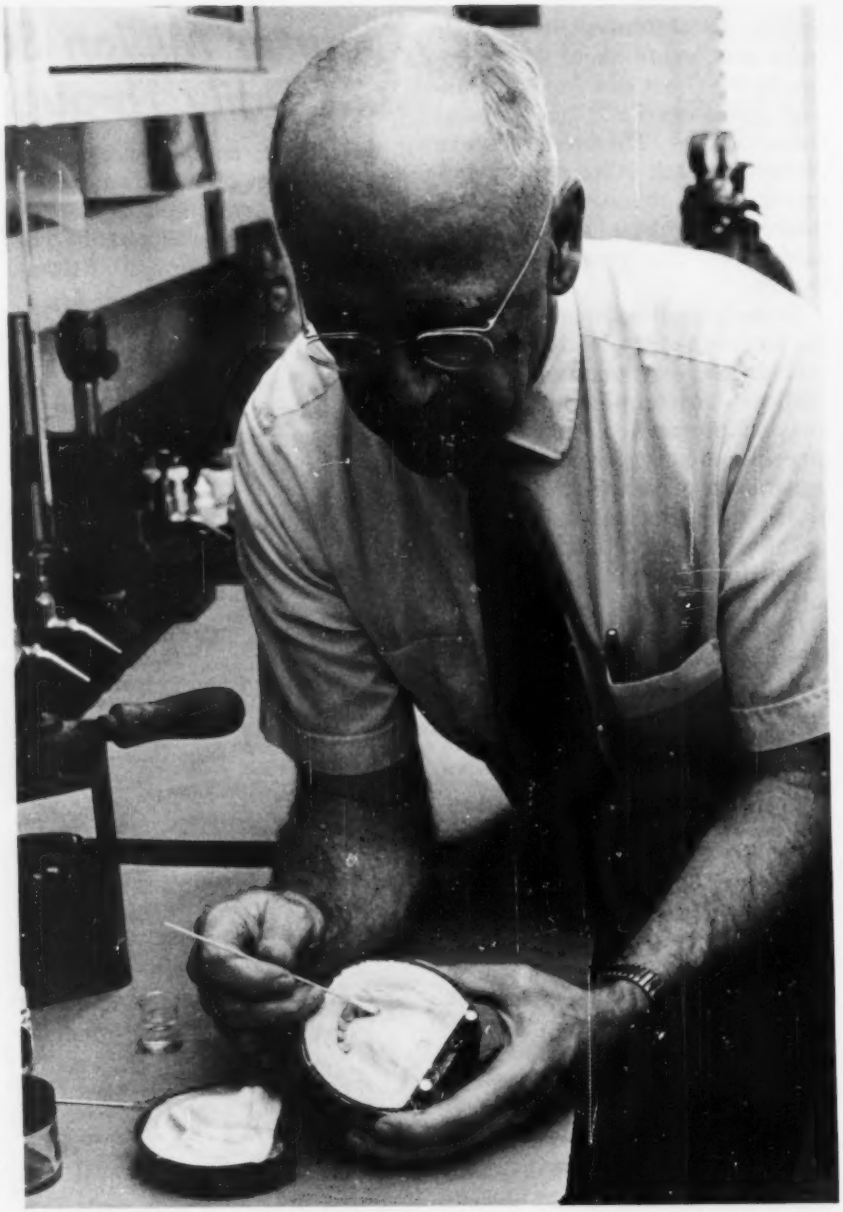
Instruments, techniques and materials used in the care of teeth must meet exacting requirements—for example, some silver amalgam fillings were found to expand too much after hardening, thus losing their effectiveness, causing severe pain, and necessitating return trips to the dentist. NBS researchers discovered the source of the problem and recommended procedures for its elimination.

Working side by side with research associates sponsored by the American Dental Association and industry groups, and cooperating with scientists of other Government agencies, NBS has spearheaded developments leading to many advances, among them:

- Providing a basis for the establishment of standards and specifications for dental materials, thereby assisting dentists to significantly upgrade the quality of dental health;
- A panoramic dental X-ray machine estimated to save the Veterans Administration and the Air Force hundreds of thousands of dollars a year;
- Development of a new form of silver alloy for amalgam fillings that required less packing pressure on the part of the dentist and thus provided increased comfort for the patient;
- A rapid-splinting "dough" developed for emergency treatment of soldiers' jaw fractures in Vietnam commonly caused by land mines, and also potentially useful for stabilizing surgical implants, replacing skull parts after surgery, making orthopedic appliances etc.;
- A water-driven turbine dental drill which was the precursor of the high-speed drills used by most dentists for surgery of the hard-tooth tissues.

Efforts are continuing in this cooperative program of NBS and the American Dental Association to further improve dental materials and techniques.

—National Bureau of Standards



IMPROVED BONDING—*Dr. N. W. Rupp, American Dental Association research associate at the National Bureau of Standards, applies a test solution to a set of acrylic resin teeth. Later, excess solution will be removed and a cold-cured acrylic resin denture base will be formed around the teeth. This research is aimed at developing improved bonding methods for plastic teeth.*

Seismic Instruments To Be Installed At Veterans Administration Hospitals

Scientists and technicians from the San Francisco-based Seismological Field Survey, a part of the Earth Sciences Laboratories of Commerce's National Oceanic and Atmospheric Administration, are installing strong-motion accelerographs at 65 Veterans Administration hospitals in areas of significant seismic risk.

The instruments are designed to respond to the strong motions close to the epicenter of a major earthquake and provide a record

of how buildings perform under earthquake conditions. This data will be used in connection with revisions to the building standards for VA facilities for earthquake-prone areas.

In addition to instrument installation, NOAA personnel will measure the vibrational characteristics of the hospitals and determine the response of selected structures to man-induced vibrations. In this kind of testing, a man shakes the structure by moving his body in time to the building's natural period. From the building's response to this very slight induced motion, structural engineers and engineering seismologists can evaluate the design characteristics of the building and estimate the building's performance in future earthquakes.

Building codes

The Seismological Field Survey began installations in California hospitals as part of their ongoing strong-motion instrumentation program there. Teams are scheduled to begin installations and structural tests in the Pacific Northwest later this year and in the central and eastern states probably during 1973.

Data obtained from the destructive Long Beach, Calif., earthquake of March 1933 did much to influence the application of earthquake building codes in that state and gave impetus to an expanded strong-motion instrument network as did the 1964 earthquake in Alaska, the 1965 tremor in Seattle, and last year's San Fernando, Calif., earthquake of February 9.

At present, NOAA operates nearly 1,000 strong-motion seismographs in the U.S., in close cooperation with some 30 local, state, and federal government agencies and private organizations. Operation of the network includes installation of the instruments, maintenance and service, instrument test and evaluation, collection of seismograms after an earthquake, and analysis and distribution of data. —*NOAA*

SUMSTAT To Provide Easier Access To Federal Statistics

Research directors of corporations, associations and public institutions will soon have easier access to statistical information from 84 Federal agencies. A system designed to simplify public access to summary statistical data produced by the Federal Government is being developed by Commerce's National Technical Information Service (NTIS).

The new system is known as the Federal Summary Statistical Data Project, or SUMSTAT. The new service reflects NTIS's recognition of the growing need for information on Federal statistical tape files.

Typical information available in the new system would range from manufacturing and foreign trade data, Census data on population, data on education, health, aviation, highways, boating, etc.

Although some agencies produce descriptive catalogs of their own publications, and a few include tape files, there is no one comprehensive catalog of all publicly available, Federally-generated summary statistical tape files. The result is that potential users have difficulty in learning of the existence and availability of specific files.

No standardized format

Locating a tape does not end the problems. Federal agencies have no standardized format for documentation or tape content. Since there is generally no agency "point of contact" for tape sales, it is difficult to find individuals who can provide adequate information concerning a file. Even where agency catalogs document tape holdings, they are often incomplete. Nor is there comparability in catalogs or file descriptions between agencies.

SUMSTAT is inventorying agencies of the Federal Statistical System, and documenting available files in a uniform style. A prototype SUMSTAT catalog lists all publicly available summary statistical tape files produced by Commerce agencies. Each entry contains information on tape format and content, as well as the persons to contact within the generating agency for further information or purchase. The present catalog is available on request, by calling (703) 321-8523, or writing to SUMSTAT Catalog, NTIS, Springfield, Va. 22151.

It is expected that an all-agency catalog will be available by mid-1973. Subscription price is planned to be between $25 and $50 a year. The catalog will be updated semi-annually.

Tape sales program

The SUMSTAT project also will include a "quality assured" tape sales program to help simplify access to most Federally-generated, publicly-available tape files. Tape copies will be sold for between $50 and $100 per reel. NTIS will verify that each tape corresponds to its documentation, and will provide industry-compatible tapes. The tape sales program is scheduled to begin in mid-1974. NTIS expects the program to be fully self-sustaining by June 1975.

As part of the market analysis performed by NTIS during the development of SUMSTAT, a series of 17 planning conferences were held in 15 major U.S. cities during May and June. Nearly one-third of the 650 attendees at these conferences returned detailed questionnaires on their reactions to SUMSTAT.

A complete analysis of the SUMSTAT questionnaires will be published by NTIS in the near future.

"We are delighted that you are holding meetings on the develop-

ment of your statistical information access system," said Kermit Gordan, President of The Brookings Institution. Among other comments were: "We are vitally interested in the prospects of such a system and the possible benefits for our 1,000 rural electric cooperative members," wrote Robert D. Partridge, General Manager, National Rural Electric Cooperative Association.

SUMSTAT is a logical extension of the NTIS role within Commerce of centralizing and simplifying public access to all Federally-generated technology. NTIS is the major supplier of Government-produced technical reports, and its technical data base, which is one of the largest in the world, includes more than 700,000 documents collected from 225 government agencies. —*NTIS*

Consumers Will Pay Higher Prices For Safer Products, Says Official

Manufacturers, the Government, and the consumer share the responsibility for improved product safety, one of the goals of the Nixon Administration, Richard O. Simpson, Acting Assistant Secretary of Commerce for Science & Technology, said in a recent speech.

"While all of us . . . want safe products, costs must, however, be taken into account in setting safety levels," he pointed out. "Consumers will have to pay for safer products in three ways: in higher prices, in loss of utility that may accompany an increase in safety, and in the reduction of freedom of consumer choice."

Speaking before the Association of Home Appliance Manufacturers at Chicago, Simpson said that while the Government has been moving rapidly with laws relating to the safety of automobiles, boats, toys, hazardous consumable products, and radiation generation devices, the great bulk of consumer products is as yet unregulated.

Bill pending

Legislation to establish an independent Consumer Product Safety Agency has passed the Senate, he said, and a bill is pending in the House to set up, instead, a Commission.

"The effect of either of these proposed bills," said Simpson, "may be less to regulate products, than to put industry on notice that it must take the action necessary to insure safe products or face the option of product regulation. The independent agency or Commission would have to establish a soundly based finding of need for regulation for each product area. The law would give industry and the public adequate chance to rebut the finding before the regulatory procedures could be started."

He added that regulations for only a small number of products would probably be developed each year. Meantime, industry and the private standards sector could be working to get their standards and compliance with those standards in order.

"For every product cited as unsafe, there are dozens which have been made safe—by industry, on its own initiative," Simpson noted, "through the voluntary standards process. Voluntary standard making originated to permit producers to simplify product lines. A voluntary system of setting product standards is entirely in harmony with this nation's basic governmental and economic philosophies."

He expressed great confidence that the voluntary standard making process can respond to the

BODY ARMOR TESTS—*Nicholas J. Calvano of the Product Evaluation Technology Division of Commerce's National Bureau of Standards, checks a .357 Magnum bullet stopped by a typical body armor or bullet proof vest. The round was fired from the weapon shown in tests at Standards' Law Enforcement Standards Laboratory. The first standard developed by the laboratory has been issued by the National Institute of Law Enforcement and Criminal Justice. It provides detailed methods for testing body armor for resistance to penetration by small arms fire. Acceptance and use of standards for police work provides manufacturers a means to standardize their setups under a single set of specifications. Police departments will be able to base purchases on laboratory-proven criteria.*

needs of the people in the marketplace.

"The present procedures were designed to handle industry problems, and the consumer was legitimately considered to be the industrial consumer, usually called the customer, or the user of the products. Thus, a steel company might sit on a committee as a consumer of electrical equipment," Simpson pointed out. "This approach was adequate for solving the industrial standardization problems of the past. Today, we are in a new society, and new pressures have sharpened our definitions of the consumer, the environment, and the marketplace."

He told the manufacturers that it will not be simple to introduce broader consumer representation into the inherently technical voluntary standards process since it is difficult to find responsible consumer representatives with the technical expertise.

Simpson suggested, however, that competent persons might be found in universities, among retired industry engineers, in technical organizations, and among young people sufficiently motivated to acquire the education to become technically qualified consumer representatives. Financing could come, he said, from the Government, consumer groups, labor unions and industry itself.

—Office of the Assistant Secretary, Science & Technology

Two Universities Earn Sea Grant College Designation For Research

The University of Wisconsin and the University of Hawaii have been designated by Secretary of Commerce Peter G. Peterson as Sea Grant Colleges, the fifth and six colleges so designated since the program began.

The first four were awarded a year ago to the University of Washington, University of Rhode Island, Oregon State University, and Texas A&M University.

"Selection to be a Sea Grant College is a rare distinction which these universities have fully earned," Secretary Peterson said. "Just as the Land Grant college concept has worked since 1862 to develop our resources in agriculture and the mechanical arts, the new Sea Grant college concept is now developing our resources in the nation's ocean and Great Lakes areas.

"Designation of a Sea Grant College comes only after a university has worked hard and with great merit to achieve the distinction. It symbolizes the mutual recognition, by the Government and the university, of a common effort to advance significantly our knowledge and utilization of the marine environment. This the Department of Commerce is delighted to affirm," he said.

Presently there are approximately 70 active individual projects and 14 institutional programs covering an additional 550 projects within the National Sea Grant network. They cover such fields as fisheries and aquaculture, transportation and navigation, coastal zone management, marine pharmacology, the technology of ocean recreation, offshore resource development, economics, law, public service, and advisory services.

First commercial harvest

Accomplishments of Sea Grant programs have included the first commercial harvest of cultured shrimp, identification of Great Lakes mineral deposits valued at more than $300 million, improved efficiency of small-business seafood processing plants, and development of innovative fishery technology for the nation's many small fishermen.

By award of Sea Grant College status, Commerce expresses its confidence in the demonstrated dedication and competence of the college in marine research and education, and assigns priority of support to the college within the limits of overall Federal priority and fiscal considerations. To be eligible for such designation, an institution must have a demonstrated record of superior performance for a minimum of three years in Sea Grant programs that encompass research, development of the marine environment, education and training of marine scientists and technicians, and an effective marine extension or advisory program.

The Sea Grant Program was authorized in 1966. With matching funds from the states and other non-Federal sources, it provides grants to universities and other institutions, public and private, for activities related to improving the utilization of the marine environment.

The Sea Grant program at the University of Wisconsin was the first on the Great Lakes and has built on existing competence at the university in scientifically treating important problems of the Great Lakes and the ocean. Five campuses plus the Extension Division are now involved in Wisconsin's Sea Grant program.

A Wisconsin program in "biological resources and microcontaminants" explores the range of problems from introduction of chemical contaminants, through their chemical modification, appearance within the tissues of food organisms, and influence on behavior and value of fish populations.

The Sea Grant Program at the University of Hawaii is tailored to the needs and opportunities of the Hawaiian Islands and U.S. Trust Territories. An ambitious program in aquaculture includes work with such exotic species as mahimahi, octopus, and Samoan crab.

—NOAA

Patents Of Special Interest

Recent patents issued by the U.S. Patent Office included:

Tree shaker and fruit harvester. A combined tree shaker and fruit harvester of such width as to be movable longitudinally in the spaces between trees having the trunks arranged in rows. The harvester includes a transversely movable carriage that has power driven shaker means and a mounted pair of conveyors and expandable deflector means. When the harvester is oppositely disposed to a tree, the carriage is moved transversely for the shaker means to removably engage the trunk, and the deflector means then expanded to cooperate with the deflector on the harvester to provide a continuous surface that extends under the branch of the tree. The deflector and deflector means cooperate to define a continuous surface of such configuration that as fruit fall they roll by gravity to the pair of carriage-supported conveyors. The conveyor means transport the fruit deposited to the first end of the harvester, where it drops by gravity and may be alternately and selectively discharged into either of two containers that are removably supported from the harvester. The harvester may be operated continuously, for as one container is filled it is removed from the harvester and replaced by an empty container. Patent number 3,683,617 issued to R. M. Vallicella, Bakersfield, Calif.

Internal combustion engine exhaust burner. An anti-pollution device for use with the exhaust system of a motor vehicle which is preferably mounted in an air foil above the rear deck of an automobile for electrically collecting and burning particles constituting combustion residue from the vehicle engine. Air is supplied to the air foil to provide sufficient oxygen to effect the complete burning of the exhaust residue. The clean and purified exhaust gases, after passing through a filter media, are discharged from the air foil across substantially its entire length and at an upward angle. Patent number 3,683,624 issued to Theodore M. Williams, Holly Hill, Florida.

Exhaust purification. Exhaust gas from an internal combustion engine at super atmospheric pressure is cooled to its dew point at the pressure then is admixed with an aqueous aerosol comprising particles of water coated with an olephilic surfactant and having an average particle size between 0.5 and 5 microns. The resultant mixture is expanded to reduce gas pressure to nearly atmospheric pressure reducing the temperature and condensing a significant fraction of water vapor in the initial exhaust mixture on the aerosolized particles. The resulting particles, have a size which permits their removal by centrifugation or equivalent means. The method is particularly effective in removing particulate matter and hydrocarbons in exhaust and can be used alone or in conjunction with means for removing nitrogen oxides. Patent number 3,683,626 issued to Edward W. Merrill, Cambridge, Mass.

Abstracts and drawings of patents are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette.* Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., 20402. A microfilm Patent Subscription Service is available from the National Technical Information Service, Springfield, Va., 22151.

Science Calendar

Oct. 17-18—Gaithersburg, Md.—National Bureau of Standards. Association for Computing Machinery, Special Interest Group on Computer Systems Installation Management.

Oct. 27-29—Milwaukee, Wis.—Wisconsin Invention Exposition. Information: Division of Economic Development, State of Wisconsin, 123 W. Washington Ave., Madison, Wis., 53702.

Oct. 30-Nov. 1—Gaithersburg, Md.—National Bureau of Standards. "Dimensional Accuracy in Mfg."

Nov. 9-11—Sioux Falls, S.D.—South Dakota Inventors Congress. Information: South Dakota Inventors Congress, State Office Bldg., Pierre, S.D., 57501.

Nov. 15—San Mateo, Calif.—Royal Coach Motor Hotel, 1770 S. Bayshore Blvd. Seminar on "How To Cash In On Inventions and New Products." Sponsored by Commerce Department, California Chamber of Commerce, Small Business Administration and California Department of Commerce.

March 14-16, 1973—Chicago, Ill.—Conrad Hilton Hotel. Industrial Water & Pollution Conference and Exposition. Sponsored by Water and Wastewater Equipment Manufacturers Assn.

March 23-25, 1973—Hill City, Kan.—Mid-America New Ideas Fair, Graham County Fair Grounds. Information: Hill City Chamber of Commerce, Hill City, Kan., 67642.

April 4-7, 1973—San Mateo, Calif.—Northern California Industrial Exposition, Hall of Inventions. Information: Northern California Industrial Exposition, Freeman and Associates, 77 Jack London Square, Oakland, Calif., 94607.

INTERNATIONAL COMMERCE REPORT

- Washington official trade briefs
- Computer show sales top $93 million
- German growth surge spurs imports
- Kenya rallies from 1971 setback
- Bangladesh relaxes import curbs
- Calendar for world traders

Export Awards: 1000th 'E,' 100th 'E Star'

Two milestones were reached last month in the nation's export expansion program: the awarding of the 1000th Presidential "E" Award and the 100th "E Star" for excellence in exporting.

The Poultry Health Service of Jacksonville, recipient of the 1000th "E" Award, and the Rocky Mountain Dental Products Co., Denver, of the 100th "E Star," were among 14 winners cited for their outstanding contributions at the National Export Expansion Council meeting (see Page 4).

► The 1000th "E Award" recipient's foreign marketing effort included modification of equipment to meet foreign price competition, establishing a complete stock of spare parts to assure service to overseas customers, arranging financing for some of its customers, and scheduling lectures for local farmers in several countries. The firm's export sales have more than doubled in the past three years.

► The 100th "E Star" recipient — for ongoing excellent performance—had been awarded the "E" in 1966. Since that time, the company has substantially increased its export sales through a product education program in Europe, South America, and Australia.

Along with the Poultry Health Service, five additional companies received "E" Awards:

► The Dummann World Trade Co., Inc., Milwaukee, exporter of food products, chemicals, and heavy machinery, was established in 1951 and now has more than 100 representatives and distributors in 31 countries representing 21 U.S. manufacturers. The firm has set up a branch office in Tokyo, and has improved packaging procedures.

► The Girton Manufacturing Co., Millville, Pa., producer of dairy and food processing equipment and exporting on a small scale for 30 years, in the mid-60s began participating in Commerce Department trade missions and international dairy congresses, and cooperating with U.S. agricultural schools. Its exports increased 360 percent between 1968 and 1970.

► The Pure-Pak unit of Ex-Cell-O Corp., Detroit, has estab-

The Presidential "E" Award was created by Executive Order in December 1961 to recognize persons, firms or organizations which make significant contributions to the nation's export expansion.

The "E Star" Award was authorized by the Secretary of Commerce in August 1969 to afford continuing recognition of noteworthy export promotion efforts by those already holding an "E."

'E' AWARD, 1000th—*Displaying pennant presented by Commerce Secretary Peter G. Peterson for excellence in exporting are officials of Poultry Health Service, Jacksonville. From left: Daan Witkamp, area manager, Central America and Caribbean; Secretary Peterson; Mars D. Cooper, president; Marinus van Gessel, acting director, Bureau of International Commerce; John Lindsey, general sales manager.*

lished spare parts depots overseas, negotiated licensing agreements for production of a special dairy carton, and participated in U.S. and other foreign trade shows. Pure-Pak's export program over the past 10 years has resulted in a 600 percent gain in installations.

► The Trade Development Division of the Washington State Department of Commerce and Economic Development, created only five years ago, coordinated trade missions to Europe and the Far East and helped sponsor participation by Washington firms in trade fairs worldwide.

► Troxler Electronic Laboratories, Inc., Raleigh, has established an overseas dealer network on a franchise basis, trained dealer personnel, participated in international seminars, and appointed an agent in Vienna to handle sales in East Europe—increasing overseas sales threefold in three years.

"E Star" recipients, in addition to Rocky Mountain Dental Products already mentioned, were:

► Anchor Hocking Corp., Lancaster, Ohio. A manufacturer of glassware and plastic ware, and of closure sealing machinery, the firm received the "E" Award in 1965. Since that time, Anchor Hocking has improved delivery service, computerized sales and service operations, expanded its sales force, and designed equipment for specific markets.

► Bandag, Inc., Muscatine, Iowa. A manufacturer of tire recapping equipment and retreading materials, Bandag was awarded the "E" in 1966. Latterly it opened a marketing office in Brussels, appointed sales managers for Latin American and Far Eastern areas, and established foreign production facilities.

► Crocker National Bank, San Francisco. This 1963 winner during 1968-70 opened a branch in London; new offices in Frankfurt, Hong Kong, Melbourne, and Tokyo; and two term-lending affiliates.

► John Fabick Tractor Co., St. Louis. This 1964 winner has in the past three years participated in trade shows, and has distributed semi-annual mailings of used and rebuilt construction equipment bulletins and technical brochures.

► International Business Machines Corp. Also an "E" winner in 1964, IBM operates customer training facilities at 72 locations in 38 countries and has 24 international support and service centers throughout the world. It maintains a computer-controlled inventory at Orly Airport near Paris from which spare parts can be shipped on an urgent basis to 100 countries.

► Nashua Corp. of Nashua, N.H. Producing highly specialized reprographic supplies, packaging and identification products, and commercial and industrial tapes, Nashua has tripled its export sales since receiving the "E" in 1968.

► Uncle Ben's, Inc., Houston. Since receiving its "E" in 1963, Uncle Ben's has almost doubled its export sales—they now amount to well over one-third of total sales—and increased its share of U.S. rice exports by 50 percent.

'E STAR' AWARD, 1000th—*Receiving congratulations from Secretary Peterson (right) for continued excellent performance, Martin Brusse (left), president of the Rocky Mountain Dental Products Co. accepts certificate as BIC's van Gessel looks on.*

Washington's

Official Trade Briefs

This article is another in a series of monthly reports outlining actions by domestic, foreign, or international agencies affecting world trade, as compiled by the Legislation and Tariff Analysis Division of the Bureau of International Commerce's Office of International Trade Policy, and by the BIC Office of International Investment.

THE PRESIDENT

Exchange Of Views With Japanese Prime Minister: President Nixon and Prime Minister Tanaka met in Hawaii Aug. 31-Sept. 1 for wide-ranging discussions on a number of topics, including economic issues of a bilateral and global nature. In a joint concluding statement, the Prime Minister and the President reaffirmed the February 1972 commitments of both countries to initiate and actively support multilateral trade negotiations covering both industry and agriculture in 1973. They noted the need in the forthcoming negotiations to lay the basis for further trade expansion through reduction of tariff and non-tariff barriers, as well as through formulations of a multilateral non-discriminatory safeguard mechanism.

The leaders also focused on various measures, both short- and long-term, to achieve a better equilibrium in the balance of payments and trade. The President explained the measures undertaken by the United States to improve its trade and payments position and stated that the Government of the United States was urging U.S. firms to expand the volume of exports, particularly to Japan, through increased productivity and improved market research.

The Prime Minister indicated that the Government of Japan would also try to promote imports from the United States and that it was the intention of Japan to reduce the imbalance to a more manageable size within a reasonable period of time. As a step toward this objective, both sides announced a commitment by Japan to purchase over $1 billion of U.S. goods and services in the coming months. In particular, Japan pledged to increase by specific amounts its purchases of U.S. civil aircraft, uranium enrichment services and agricultural, forestry, and fishery products.

In addition, both Governments agreed to use their best efforts to establish a Japan-U.S. working group to examine the feasibility of a joint venture for construction in the United States of a $1 billion gaseous diffusion enrichment facility for peaceful uses. Finally, the President noted with appreciation the recent decisions by the Government of Japan to liberalize access to its distribution system by allowing improved investment opportunities in retailing, processing and packaging, as well as the decision to allow greater sales of U.S. computer products in Japan.

The Prime Minister and the President agreed to hold a meeting of the Joint United States-Japan Committee on Trade and Economic Affairs as early in 1973 as feasible.

Additional Oil Imports: On Sept. 18 President Nixon amended Proclamation 3279, which governs the Mandatory Oil Import Program, to allow all importers of overseas oil and oil products into Districts I-IV to draw on their calendar year 1973 allocations by up to 10 percent of the amounts of their regular 1972 allocations made to them prior to Sept. 1 of this year. The President also made an additional allocation of 5,000 barrels per day on an annual basis to independent East Coast deepwater terminal operators and increased the allocation for Canadian imports by 12,250 barrels per day. In addition, President Nixon directed the Secretary of the Interior to distribute the remainder of the overseas crude oil held for contingencies—about 25,000 barrels per day—to refiners.

Export Law Amended: On Aug. 29, the President signed into law S. 3726, now P.L. 92-412. Title I extends export controls to June 30, 1974; requires the Dept. of Commerce to review commodity controls and certain export licensing procedures; provides for establishment of technical industry advisory committees; and rescinds cattle hide controls. Title II gives a one-year statutory basis and authorizes appropriations for the Council on International Economic Policy (CIEP).

CONGRESS

Senate Votes: By a vote of 79-0, the Senate recently approved U.S. adherence to the UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property.

On Aug. 18, the Senate passed and sent to the House S. 2483 with amendment, to formulate plans and programs to convert the United States to the metric system of weights and measures.

House Vote: On Sept. 14, the House passed H.R. 16593, the 1973 defense appropriations bill, which contains a "buy-American" provision affecting specialty steels, such as stainless steel and tool steel, and a few other specialty metals, such as titanium and its alloys. Following House passage, the bill was sent to the Senate.

Committee Action: On Sept. 9, the House Committee on Ways and Means reported H.R. 14386, to continue until June 30, 1974 the existing suspension of duties on certain forms of copper, as amended.

The Subcommittee on Foreign Economic Policy of the House Committee on Foreign Affairs sub-

mitted a report on Aug. 29 with recommendations reflecting the Subcommittee's hearings on trade adjustment assistance held earlier this year.

On Sept. 19 the House Committee on Finance ordered favorably reported the following measures: H.R. 640, permitting the duty-free importation of upholstery pins (with an amendment to temporarily provide extended unemployment benefits in States not eligible under present law); and H.R. 9463, prohibiting the importation of pre-Columbian sculpture and murals into the United States contrary to the laws of country of origin (with amendments relating to customs port security and judiciary review for domestic manufacturers in countervailing duty cases).

New Legislation: Since the opening of the 92nd Congress, some 519 trade and related bills have been introduced. Of these, 104 contain specific quota provisions and 49 contain general orderly marketing provisions, applicable when imports surpass stated levels of domestic consumption. Legislation not previously reported includes: H.R. 16245, to regulate commerce to protect health and the environment against toxic chemical substances; H.R. 16326, to amend the tax and customs laws in order to improve the U.S. position in foreign trade; H.R. 16330, to prohibit importation into the United States of birds, or parts thereof, unless inspected and found to be free of communicable diseases; H.R. 16387, to provide that certain forms of zinc be admitted free of duty; H.R. 16421, to promote the foreign policy and security of the United States by providing authority to negotiate a commercial agreement with Romania.

H.R. 16549, to suspend the duty on cyclohexanone oxime until Dec. 31, 1972; H.R. 16599, to extend through Dec. 31, 1974, the suspension of duty on electrodes for use in producing aluminum; H.R. 16600, to amend the Tariff Act of 1930 to provide an exemption from the restrictions of the trademark laws; H.R. 16690, to amend the Trade Expansion Act to provide assistance to firms and workers which suffer serious economic injury as a result of the elimination of export controls on agricultural commodities by the United States; H.R. 16694, to amend section 231 of the Trade Expansion Act of 1972 to permit the extension of trade agreement concessions on a selective and a reciprocal basis to products of the USSR; S. 3933, entitled the "Hide Regulation Certificate Act of 1972"; S. 3936, to amend Title III of the Trade Expansion Act of 1962 to provide more effective adjustment assistance thereunder; S. 3964, to amend section 516 of the Tariff Act of 1930; and S. 4004, to prohibit transportation or shipment within the United States of gas cylinders not inspected in the United States.

TARIFF COMMISSION

Commission To Study Competition Between Domestic and Foreign Asparagus: In response to a request from the House Committee on Ways and Means, the Tariff Commission instituted an investigation under Section 332 of the Tariff Act of 1930 of the conditions of competition in the United States between asparagus being produced domestically and asparagus produced in foreign countries and imported under Items 137.85, 138.00, and 141.81 of the Tariff Schedules of the United States. Under Section 332, the Commission reports the facts developed during its investigation but does not make recommendations for Government action affecting imports.

A public hearing on this investigation will be held Oct. 31 in San Francisco. Parties wishing to testify should notify the Secretary of the Tariff Commission in writing. Contact: U.S. Tariff Commission, 8th & E Sts., NW., Washington, D.C. 20436.

Commission To Simplify Application Procedures For Workers: The Commission expects to announce by Oct. 15 a revision of its rules to simplify and expedite procedures which must be followed by groups of unemployed or underemployed workers making application for adjustment assistance under the Trade Expansion Act of 1962.

Adjustment Assistance—Firms: During the first week of September, the Commission opened two new investigations on behalf of firms alleging injury due to increased imports. After examining the effect of imports, the Commission will determine whether the following firms are eligible to apply for adjustment assistance: Wilson Shoe Corp., Shamokin, Pa. **(women's and misses' footwear** provided for in TSUS items 700.43 and 700.45); and the Willingham Cotton Mills, Macon, Ga. **(plain woven fabrics wholly of cotton and woven fabrics of manmade fibers,** as specified in TSUS 320.01-320.09 and 338.30). A petition also has been filed on behalf of the workers of the Willingham Cotton Mills (see below).

Adjustment Assistance—Workers: The Commission has instituted an investigation into the effect of imports on the former workers of the Clifton, S.C., plant of the Woodside Division of Dan River, Inc. **(coarse cotton fabrics).** An investigation was also opened on behalf of workers at the Willingham Cotton Mills, Macon, Ga. **(plain woven fabrics wholly of cotton and woven fabrics of manmade fibers).**

In its reports of seven investigations on behalf of worker groups, the Commission found that the criteria establishing eligibility to apply to the Secretary of Labor for adjustment assistance were met in three instances. Those involved in positive determinations include workers at the following plants: Frank H. Pfeiffer Co., Worcester, Mass. **(women's and misses' footwear);** Otto Goedecke, Inc., Hallettsville, Tex. **(coarse cotton yarns and fabrics);** and Abex Corp., Co-

lumbus, Ohio (workers producing **industrial hydraulic valves** only). In four instances, the Commission determined that workers at the following plants were ineligible to apply for adjustment assistance: United States Shoe Corp., Cincinnati, Ohio (**women's and misses' footwear**); Plymouth Cordage Div. of Columbian Rope Co., Plymouth, Mass. (**cordage of manmade and hard vegetable fibers**); Handley Mills, Inc., Roanoke, Ala. (**plain-woven cotton fabrics**); and Archer Mills, Inc., Columbus, Ga. (**women's and girls' hosiery**).

Dumping Cases: The Tariff Commission has concluded two investigations of articles previously determined by the Treasury Dept. to be sold in the United States at less-than-fair value (LTFV). In one investigation, the Commission announced that a domestic industry is sustaining injury from LTFV imports of **instant potato granules** from Canada. As a result of the Commission's decision, such imports will be subject to special dumping duties. In another decision, the Commission notified the Secretary of the Treasury that a U.S. industry is not sustaining injury by reason of LTFV imports of **pentaerythritol** from Japan. In addition, the Commission opened antidumping investigations of two products: **wool and polyester/wool worsted fabrics** from Japan; and **metal parts for residential lamps** from Canada.

Section 337 (Unfair Import Competition) Cases: Following receipt of a complaint filed by W. L. Gore & Assoc., of Newark, Del., the Commission recently opened an investigation of alleged patent infringement involving imported **expanded, unsintered polytetrafluoroethylene in tape form** for sealing threaded joints. Information pertinent to the investigation should be submitted to the Commission by Oct. 16.

Following a preliminary inquiry, on Sept. 14, the Commission initiated a full investigation with respect to unfair acts in the importation and sale in the United States of **certain writing instruments and nibs therefor,** as alleged by Venus Esterbrook Corp. The Commission decided not to recommend at this time that the President issue a temporary exclusion order. The location and date of a public hearing on this investigation will be announced later.

The Commission recently gave notice of two amendments to previously filed complaints. Based on a complaint filed by Multi-Med Industries, Inc., the scope of the Commission's inquiry of certain **disposable catheters with cuffs** has been amended to include disposable catheters with inflatable balloon cuffs. In a separate patent infringement investigation involving **combination measuring tools,** the names of the respondents have been amended and further unfair acts have been alleged by the Stanley Works of New Britain, Conn., the original complainant.

OTHER AGENCIES

Treasury—Policy Discussions With Japanese On Antidumping: A Japanese delegation, led by Naohiro Amaya, Director of International Economic Affairs of the Ministry of International Trade and Industry, participated in discussions on antidumping policy and U.S. administration of the Antidumping Act of 1921 at the Treasury Department on Sept. 11-12.

Treasury—Dumping Cases: Treasury has withheld appraisement on three articles: **roller chain, other than bicycle,** from Japan; **collapsible baby strollers** from Japan; and **canned bartlett pears** from Australia. Under provisions of the Antidumping Act of 1921, the Secretary of the Treasury is required to withhold appraisement whenever he has reason to believe or suspect the existence of sales at less-than-fair value (LTFV).

In three other investigations, Treasury found sales at LTFV with respect to **wool and polyester/wool worsted fabrics** from Japan; **30-pound MF (Machine Finish) Kraft wrapping paper** from Canada; and **metal parts for residential lamps** from Canada. These cases have now been referred to the Tariff Commission to determine if U.S. industries are sustaining injury by reason of the LTFV imports. In other dumping investigations, negative LTFV determinations were made with respect to two products from Canada: **fire extinguishing foam** (final finding) and **stainless steel automobile splash guards** (tentative finding).

In other Treasury dumping activity, new investigations to determine if sales at LTFV are occurring have been initiated with respect to: **surgical rubber gloves** from Austria; two products from Japan, **steel wire rope** and **synthetic methioxine;** and **electronic color separating or sorting machines** from the United Kingdom. An investigation into sales at LTFV was discontinued for **neopentyl glycol** from Japan.

Treasury—Countervailing Duty Case: On Sept. 8, Treasury announced modification of the countervailing duty order on **canned tomatoes and canned tomato concentrates** from Italy. Italy has discontinued subsidy programs on these products exported directly to the United States so they are no longer subject to countervailing duties. Countervailing duties at new rates will continue to be assessed on canned tomatoes and canned tomato concentrates if exported from Italy to third countries and thereafter imported into the United States.

Commerce—Adjustment Assistance: On Aug. 22, the V-M Corp. of Benton Harbor, Mich., was certified as eligible to apply for adjustment assistance as provided by the Trade Expansion Act of 1962. Accordingly, V-M Corp., which produces record changers, radio-phonograph combinations, and tape recorders, players, and decks, may now submit adjustment assistance proposals to the Commerce Depart-

ment's Office of Trade Adjustment Assistance. In another action, the Secretary of Commerce approved a trade adjustment proposal submitted by the Bibb Co., Macon, Ga. The firm, which has produced primarily coarse corded cotton yarn and coarse cotton fabric, will receive approximately $3 million in tax assistance to aid in financing increased sales of several new lines of home furnishings.

Labor—Adjustment Assistance: On Aug. 21, the Bureau of International Labor Affairs announced that approximately 160 workers of the Harker China Co., Chester, W.Va., whose employment was adversely affected by increased imports of earthen dinnerware sets, have been certified as eligible to apply for trade adjustment assistance.

The Department of Labor certification follows a Tariff Commission report to the President that the workers involved became unemployed or underemployed because of increased imports, resulting in major part from trade agreement concessions.

International Trade Briefs

Foreign Dumping Actions: The Canadian Department of National Revenue has initiated two dumping investigations with respect to products of U.S. origin: certain **caulking and sealing compounds;** and **panel adhesive.** In other dumping action, the Canadian Antidumping Tribunal has announced its finding that imports of **vinyl-coated fiber glass insect screening** from the United States are causing injury to Canadian producers and will be subject to special dumping duties.

In the United Kingdom, the Department of Trade and Industry has opened a dumping i nvestigation of certain **high density polyethylene** from the United States.

Final Market Share Reports Now Ready

Six more country reports in the current (1966-70) series of Market Share Reports are now ready for distribution.

This year, these reports have been prepared from export, rather than import, data of the 14 supplier nations, as the processing of the official national import figures for 1970 has not been completed by the United Nations.

With the exception of Malaysia, this completes the list as published in the May 1 issue of *Commerce Today*. An updated Malaysian report will not be issued this year as the government has not provided computer usable information to the United Nations for 1968, 1969, and 1970.

The additional countries for which reports have just been published are: Australia, MSR 72-90003; Brazil, MSR 72-90007; Republic of Korea, MSR 72-90037; Mexico, MSR 72-90043; Pakistan, MSR 72-90050; and Thailand, MSR 72-90063.

For a copy of any country report, write to the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22151. The price is $3 each.

World Bank Group Sets Loan Record

Of special interest to U.S. suppliers is the record lending of $3 billion by the World Bank Group to developing countries during fiscal 1972. Not only has there been an increase in the lending volume but the base of the Group's assistance is being broadened to include urbanization, population planning, nutrition, education, and rural development.

The World Bank Group consists of the International Bank for Reconstruction and Development, the International Development Association, and the International Finance Corporation.

To finance the lending and investment operations, 30 issues of Bank obligations totaling $1,744 million were sold—17 through public offerings in the capital markets, and 13 by private placement. In March, the Bank arranged for the single largest borrowing in its history when it signed an agreement with the Bank of Japan to borrow up to $325 million in yen. The Bank raised funds also in Belgium, Canada, France, Germany, Kuwait, the Netherlands, Switzerland, the United Kingdom, and the United States.

A combined annual report by the executive directors of the Bank and IDA and a separate report published by IFC are available from IBRD, at 1818 H St. NW., Washington, D.C. 20433. The Commerce Department continues its efforts to make U.S. suppliers aware of business opportunities arising under lending from the World Bank Group. However, specific questions concerning export opportunities under World Bank Group procurement may also be addressed to the U.S. Executive Director of the Bank.

Commerce Issues Report On U.K. Tariff Changes

A new report by the Commerce Department shows how U.K. tariffs will change on 67 categories of industrial products as a result of the United Kingdom's entry into the European Economic Community next year.

Pertinent sections of the report may be obtained by U.S. firms from the Western European Division, Bureau of International Commerce (BIC-888), U.S. Department of Commerce, Washington, D. C. 20230. Requests should specify the SITC, BTN, or Schedule B numbers of the product groups of interest.

Trade Fairs, Centers

U.S. Exhibitors Of Security, Analytical Items Needed

Analytical instruments for science and industry, Japan. The demand for analytical instruments for science and industry in Japan is expected to reach $103 million in 1973. Consumption in 1966 totaled only $33.4 million. The market remains strong, with every indication that it will continue its 30 percent annual expansion for the next few years.

To help U.S. manufacturers capture a larger share of this market, the Commerce Department's Bureau of International Commerce will mount an exhibit/seminar at the U.S. Trade Center in Tokyo May 14-19.

Market research has revealed strong sales prospects for automated and computer-controlled analysis systems and accessory components, atomic absorption spectrophotometers, gas and liquid chromatographs, thermal analyzers, and environmental pollution analysis/monitoring systems.

The change in Japan's emphasis from capital expansion in manufacturing to development of the general welfare, Japan's economic recession of 1971, and the overall slack in world demand have left Japan's manufacturing industries with excess capacity. The resultant increase in overhead costs, plus the rise in labor costs and the greater competition from lower-priced imports will require Japan to invest in equipment, especially analytical instruments which will reestablish profit margins and sales volumes.

Recent legislation undertaken by the Japanese Government in such areas as control and prevention of water and atmospheric contamination will mean increased demand by the majority of manufacturing industries and at all levels of government for analytical instruments for monitoring and control.

Moreover, the Japanese Government, concerned by overly large foreign exchange reserves, is now embarked on a program to encourage imports in a wide range of products, including analytical instruments.

Exhibit space is available for about 32 U.S. firms. For further information contact your Commerce Field Office (see list inside back cover) or write the Office of International Trade Promotion (BIC-950), U.S. Department of Commerce, Washington, D.C. 20230.

Industrial and commercial security equipment, United Kingdom. Fire and crime security is one of the United Kingdom's most important growth markets. Some estimates of the size of the market for security devices and services range as high as $450 million, although $400 million is probably more accurate, split nearly evenly between fire and crime security. The average growth rate is an estimated 20 percent a year.

U.S. suppliers of security and fire protection equipment will have access to prospective British buyers who have been pinpointed by market research at a March 5-9 exhibit at the U.S. Trade Center in London.

Four major market areas are apparent:

- Industrial and transportation
- Financial, commercial, and retail
- Residential, private auto and boat
- Institutional

The largest marketing opportunities are demonstrably in the first two areas, with home and private property protection forming an ever-increasing market. The institutional area—hospitals, museums, government buildings—is not easily defined, but according to trade sources, the market is growing.

Intensive education efforts undertaken by the British insurance industry and governmental bodies are leading to increasing security awareness on the part of industrial and commercial interests.

For details, call William S. Gaines at 202-967-4073, or write him at BIC-946, U.S. Department of Commerce, Washington, D.C. 20230.

Commerce To Test Consumer Goods Exhibit Program

The revival of the Bureau of International Commerce's consumer goods sales program is symbolized by a new technique being developed with overseas retail establishments this year, called "In-Store Promotions." A few pilot projects featuring sales of United States consumer products will be initiated in distinguished department stores abroad from Japan to Australia.

Kickoff will be a multi-million dollar American Fortnight at ten Seibu Department Stores and ninety-three Seiyu supermarkets in and around Tokyo from Oct. 6-18. The stores have purchased advanced housewares, textiles and apparel, appliances, home furnishings, furniture and novelties to fill their counters with U.S. goods. They hope to attract hundreds of thousands of customers with a U.S. Skylab exhibit, space lunar vehicles, Mississippi Indians, and modern U.S. paintings.

The town of Dornbirn, Austria will also feature a smaller scale American promotion this fall. It will be followed this spring by larger promotions at the Shalom stores in Tel Aviv, Israel and George's in Melbourne, Australia.

FACE TO FACE CONTACT—*Anderson Jacobson Co. officials, at right, had their hands full answering questions from a steady flow of prospective Japanese customers at the U.S. computer show in the International Trade Center at Tokyo.*

Computer Shows On 3 Continents May Yield $93 Million In Sales

Producers of U.S. computers and related equipment expect more than $93 million in sales during the coming year as a direct result of recent exhibits at three Commerce-sponsored shows overseas.

Tokyo: $45 Million

One week's effort, a solo exhibit of U.S. computers at the Tokyo International Trade Center, is expected to produce more than $45 million in export sales to Japan in the coming year.

"This exhibition far exceeded our expectations as to the quantity and quality of prospects," said the Berg Electronics representative.

"Excellent help in all areas of making contacts with potential partners and agents; also excellent help in learning quickly about opportunities and pitfalls," was the verdict of the Anderson Jacobson Inc. director of marketing.

"The advance publicity was so well conducted that potential customers did not want to miss this show," said Caelus Memories' man on the scene.

The 59 exhibitors made more than $3.5 million in off-the-floor sales, which are unusual for computer equipment. They expect another $42 million in sales during the year following the exhibit. Top sellers included mini-computer systems, input/output equipment, and memory systems.

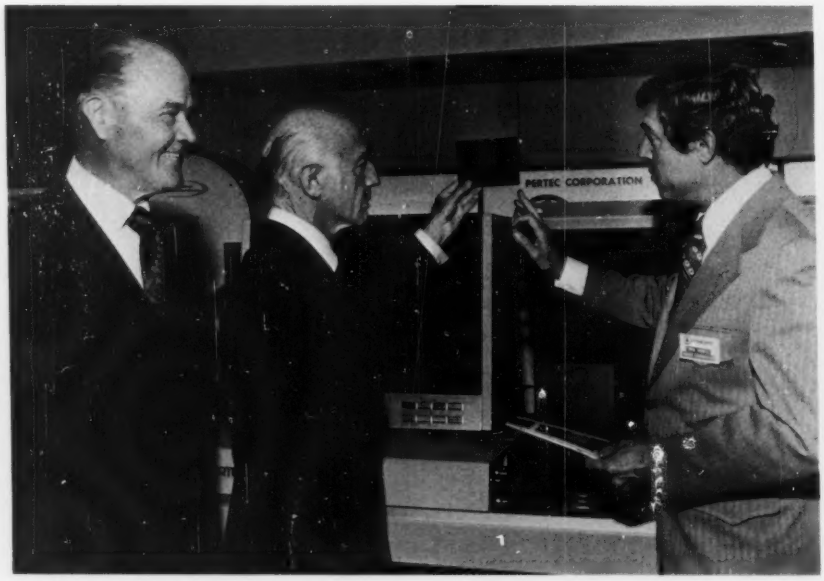
Eleven exhibitors were seeking representation in the Japanese market. Four signed agreements during the show, and the other seven opened negotiations with prospective representatives.

Sydney: $31 Million

The Prime Minister of Australia opened the exhibit, and he was followed by an almost equally distinguished group of businessmen who proceeded to "buy the place out."

After Prime Minister William McMahon had cut the ribbon at the opening ceremony, the first of more than 4,000 registered business visitors at the week-long exhibit of U.S. computers swooped into the U.S. Trade Center in Sydney and began making off-the-floor purchases that would eventually total more than $4 million. The 34 exhibitors, representating 38 U.S. firms, expect another $27.6 million in sales during the year following the exhibit.

"It was without a doubt the best



VIEW FROM THE TOP—*Australian Prime Minister William McMahon, center, inspects the microfilm output of the Pertec 3700 computer at Sydney Trade Center show of U.S. computers, as U.S. Ambassador to Australia Walter L. Rice (left) and Pertec Vice President for Marketing Jack Ferris look on.*

computer show I have exhibited in, in this country," said Dick Hart, training manager for Standard Telephones and Cables. "We got more out of the exhibition in exposure to new business prospects than we could have ever hoped for."

"I go into other exhibitions only because my competitors go into them, but I come here to sell goods," said W. J. Anderson, director of DC Datagraphix.

"This exhibition was just unbelievable as far as the quality of the attendees is concerned," according to Mr. F. Benefiel, manager of Datanamics.

The Australian agent for Litton Automated Business Systems reported that "the chairman and board of directors of Litton were ecstatic over the exhibit, the quality of attendance, and the results. Not only were there decision-makers from the companies who could buy equipment, but also consulants from independent firms who advise these decision-makers. We feel that it would have taken us between six and twelve months to reach these people who attended the exhibition during 4½ days, if we could have made contact with them at all."

Two representatives were appointed during the show, and negotiations begun with another 16.

SHOW AND TELL—*Racal-Milgo commercial engineer, at right, explains his firm's product to a prospective customer at the Paris Trade Center's minicomputer show.*

Paris: $16 million

With more than $16.5 million in sales expected to result in the 12 months following the exhibit, the Paris U.S. Trade Center's managers termed a recent minicomputer show "a resounding success." A total of 1,876 registered visitors viewed the 47 exhibits of 75 U.S. firms.

Seven exhibitors were seeking representation in France or elsewhere in Europe; five agency agreements were signed during the show and negotiations with another 31 potential representatives were continuing as the show closed. One U.S. company official complained of difficulty in selecting an agent, "choosing one meant rejecting several which were very well qualified."

Foreign attendance at the exhibit received a strong boost when the U.S. Embassy in the Netherlands organized a special charter flight of 75 Dutch businessmen who spent a day viewing the exhibits.

NEW PACKAGING TECHNIQUES—*Guatamala City audience listens to packaging and food industry seminar team which recently toured Central America. The twelve-member team, sponsored by the U.S. Department of Commerce's Office of International Trade Promotion, also held a two-day session in San Jose, Costa Rica for packaging and food industry executives of the southern countries of Central America, and Panama. In addition to these formal sessions, several days were set aside in each city for plant tours and individual business discussions by team members with local businessmen.*

Worldwide Business Outlook

German Demand Expands As Economy Accelerates

Economic activity in Germany is picking up faster than expected following the stagnation of 1971. The U.S. Embassy in Bonn also reports that prospects for U.S. export sales appear very favorable.

Real GNP in the first half of 1972 was some 2 percent above the same period of 1971—according to preliminary Bundesbank estimates —and the rate of growth is probably picking up somewhat during the second half. Private consumption is relatively strong again in the second half, although the actual year-on-year growth rate is likely to be less than in previous years. Total employment and total hours worked in the economy are below last year's peak level and are likely to remain so — as manufacturers concentrate on rationalizing production and cutting costs—and the growth rate of wages and salaries is below rates recorded in previous years.

The repayment of the temporary income tax surcharge to taxpayers should offset these effects to a certain extent, so that the year-on-year growth rate of disposable income in the second half—although lower than in previous years — should not drop below the 9 percent predicted by the Ifo Research Institute.

Retail sales grew more slowly in the first half than in the past two years and, in fact, actually decreased in volume during April and June (after adjustment for seasonal factors). Incoming orders for consumer goods during the first half painted an inconsistent picture of retailers' expectations, but orders were clearly growing at rates below those of the previous two years.

The public sector is likely to consume at a more rapid pace than the private sector over 1972 as a whole. A year-on-year growth rate of 13 percent in the second half, as expected, would result in a growth rate of 12.5 percent for the year. Rapid increases in prices will cut deeply into the increase of public consumption, however, and expenditures in constant prices are likely to grow by no more than 5 percent in the second half (year-on-year).

Cautious prediction

Exports grew at a year-on-year rate of 6 percent in the first half of the year and should continue to pick up if economic activity continues to recover in Europe and the United States. A certain amount of caution is necessary in considering this prediction because some inflation of the first half export figures may have resulted from catch-up activity following the Metal Workers strike in Germany in late 1971 and the currency realignments in December.

However, incoming export orders have been relatively strong and increasing economic activity among Germany's trading partners should help overcome the negative influences of the currency realignment and the continuing domestic cost pressure on exporters.

In view of improved sales prospects, fixed investment should strengthen. Most prognosticators expect investment in equipment to register a positive year-on-year growth (perhaps as much as 2 percent) in the second half. In addition to demand factors the need to rationalize production is generally accepted as an important stimulus to investment, helping to offset such negative factors as slow growth of profits and high interest rates.

The residential construction boom appears to be past its peak, though still strong, and public construction may replace housing as the driving force in this sector. Industrial construction has been declining and is not expected to rebound sharply.

Imports, stimulated by the upswing in economic growth, actually grew faster in volume terms than exports in the first half of the year —11 percent year-on-year rate versus 6 percent—but the terms-of-trade effect has been large enough that in value terms German imports grew by only 5.7 percent while exports were up by 7.4 percent. The result was an increase in the 6-month balance of trade surplus to DM 8.4 billion—DM 1.5 billion more than the surplus for the same period of 1971.

Price inflation will remain a serious problem for the German economy in the foreseeable future. The recovery of total demand from the slight setback of last year occurred before price pressure had diminished markedly. The cost-of-living index in the first seven months was 5.4 percent above the index for the same portion of 1971. More importantly, the monthly year-on-year rate of increase re-accelerated to 5.4 and 5.6 percent in June and July, respectively, after having slowed to 5.1 percent in April and May. Industrial prices, which began to rise more slowly in the last half of 1971, did not decelerate further in the first half of this year and, in fact, appear to have begun to accelerate again in recent months.

The rate of increase of industrial wages and salaries, which began to drop in the second half of last year, now appears to be accelerating again. This development—if it is indeed a trend—will offset the faster growth of productivity, causing the rate of increase of unit labor costs to go up once again. At the same time, stronger growth of total demand means that businessmen will be in a good position to pass on increased costs to domestic buyers.

GERMANS VIEW CALIFORNIA PRODUCT—*Horst Ditton (left), representative for The Deutsch Company, Banning, Calif., explains his firm's integrated cabling system to visitors at a Frankfurt Trade Center Electronic Components Show in June.*

The recovery of the German economy offers favorable prospects for U.S. exports. Pricing advantages gained through the December 1971 currency realignment have been further enhanced by the comparatively fast growth of inflation in Germany. This improvement in the competitive position of U.S. exports has not yet become visible in the German foreign trade statistics.

As might be expected, the price effect of the currency realignment has not yet had a major impact on the actual volume of U.S. exports. German imports from the United States in the first six months were actually some 20 percent less than the total for the same period of 1971, expressed in Marks, and the U.S. market share declined to 8.7 percent for the first half — down from 11.6 percent in the first half of last year.

This apparent discrepancy between potential and actual performance is explained by the fact that because realignment has produced lower DM prices, a German import of the same unit volume of U.S. products will now appear as a lower value expressed in Deutschemarks. According to the Bundesbank, the dollar devalued by a total of 13.6 percent against the Mark in December 1971 while the devaluation of all currencies against the Mark came to only 6.5 percent.

Leaving the complexities of the parity change aside, the consumer goods sector offers a number of opportunities for alert exporters. A particularly interesting trend shows the consumer expressing his individuality much more intensely. Boutiques and other forms of non-mass merchandising are seen more and more frequently. Shopping centers and shopping malls in housing developments are becoming more commonplace. In the fast foods area, several solid new franchising operations have been launched. This form of marketing warrants continuous monitoring in Germany.

Consumer durable goods sales—other than vehicles — have continued to do well this year, and should offer many opportunities, although the expected slowdown in growth of overall private consumption might hurt prospects in that area.

Trade Center show

Certain types of machinery are particularly well positioned to take advantage of competitive pricing and advanced American technology. Among these are pumps, valves and compressors. Equipment which American manufacturers can supply competitively includes: leakproof circulation pumps and valves for nuclear reactor cooling systems, chemical process pumps, electro-mechanically and electromagnetically actuated control valves, monel and stainless steel gate and ball valves, high-pressure radial and axial piston, air and gas compressors, and centrifugal compressors for polyethylene production. An exhibition covering these lines has been scheduled for the Frankfurt U.S. Trade Center.

Similarly, a strong position in the electronic components, measuring and testing equipment field will be exploited through an official U.S. Government participation at ELECTRONICA 72 in Munich in late November.

Recently completed market studies depict information storage and retrieval systems as one of the outstanding growth industries in Germany. American products which are likely to find a ready market include: readers and automatic printers; specialized microfilm cameras; microfilm processing equipment; computer output microfilm (COM) systems; aperture card systems; microfiche systems; and cartridge systems. The Department of Commerce offers American manufacturers and exporters a showcase for their latest products in mid-November at the European Microfilm Congress in Mainz.

Preliminary data on the demand for modular housing techniques and welding and cutting equipment suggest that there may be substantial opportunities for American suppliers in these product lines. Farm income appears to be on the rise again, so possibilities should exist for aggressive marketing of farm machinery and fertilizers.

German agricultural imports in the first half increased 7 percent over the first half of 1971 and may reach $8 billion over the year as a whole — a new record. Imports from the United States, at $384 million (c.i.f. basis), were slightly less than in the same period of 1971. Total U.S. farm exports may still approach last year's peak, but the U.S. share of agricultural imports could drop to about 10 percent.

Revival Of Economy Lets Kenyans Concentrate On Development Again

Kenya's economy is picking up this year after a slowdown in 1971. A comeback in agriculture is leading the way, according to the U.S. Embassy in Nairobi, supplemented by strong growth in tourism and manufacturing.

Manufacturing, construction, and tourism had record years in 1971, but could not offset the effect of drought on agricultural output. A substantial overall balance of payments deficit emerged for the first time since independence, because a vigorous development policy caused investment and public spending to grow faster than planned, creating a demand induced boom in imports. Overseas inflation swelled the import bill, and invisible earnings and capital flows could not cover the trade imbalance.

Resources are strained

Domestic resources are strained, and unless external capital assistance can be increased dramatically, development must slow down. Unemployment and uneven income distribution are still major problems, but rural development programs are moving forward.

Kenya's planners look for GDP growth on the order of 8-10 percent in current prices this year. The major contributor to this rebound is improved agricultural productivity; the Kenyans are hoping for a 15 percent jump in marketed agricultural production. Two possible dark clouds on the horizon: since the United States has banned DDT, natural pyrethrum supply, already below demand, may never be able to catch up and users will be compelled to develop a synthetic; and exports of pineapples, the largest horticultural item, may be hindered by French protection of francophone African pineapple producers, who sell to the EEC duty free while Kenyan pineapple faces a 26 percent duty.

It is hoped the revival of agriculture will generate more activity in related processing industries, while new import controls will boost domestic import substitution activities. Building and construction is doing as well or slightly better than last year. Tourism is probably headed for another record year.

On the balance of payments side, exports are up sharply, growing perhaps $17-22 million. The import control program should cut imports by $42-56 million, and as a result, the current account deficit may be only half as large. If long-term private and public capital flows can be increased as hoped, the balance of payments may come close to the breakeven point.

By and large, Kenya's economic performance has been remarkably good. The troubles that emerged in 1971 are symptomatic of an energetic development policy that is stretching to make maximum use of all available resources. The speed with which changes in the balance of payments and public spending were detected and confirmed in statistics itself bodes well for the chances of success in arresting them. Kenya has competent economic planners who heed advice from sources such as the World Bank and know when to call for it, and its economic policies are not ensnared in ideological rigidities.

The creation of import substitution industries encouraged by protection has provided Kenya with a steady rate of industrial growth in the past three or four years, but at a price. Most new industries have been capital intensive. Their heavy equipment imports have added to the balance of payments deficit, and for the amount of scarce resources spent, they have done little to relieve unemployment. Moreover, they may actually save very little in foreign exchange, since they depend on a steady stream of imported inputs. Since these inputs enter the country duty free, the Government also loses customs revenues.

Aware of such shortcomings, Kenya's planners may cast a more critical eye on future foreign industrial investment, the possibility of such a change in strategy does not mean U.S. investment will not be welcome. The Development Plan depends heavily on foreign private capital, and Kenya is well aware of the need for businesslike policies to protect its international credit rating at a time when it must seek a tremendous increase in external finance to keep the momentum of development going.

Lost markets?

Although termed temporary, the new import controls are likely to be around for some time. Their effect on U.S. agricultural exports to Kenya is already becoming apparent, with sales down by 25-30 percent in the first five months of 1972 compared with the same period in 1971. This may mean permanently lost markets for some U.S. companies since the Kenyan market is too small for it to be feasible to set up local manufacture of every item barred by the controls.

However, for U.S. firms concerned at losing sales but not yet sure if they want to invest in local manufacturing facilities, there may be a way out. The import controls were designed to stem foreign exchange outflows, and they accordingly state that foreign exchange will not be made available to pay for imports of products already made in Kenya, and set quotas for exchange allowed to pay for other imports. They do *not* state that imports of such goods are physically banned.

Thus, if a U.S. firm contemplating some form of investment or licensing agreement is willing to accept payment for its sales in Kenya shillings, there would seem

to be no obstacle to continued sales of its products. Although not repatriable, these earnings could be used to cover local salary and construction costs should the decision be made to proceed with an investment.

More tourists visit Kenya from the United States than from any other country outside East Africa. By implication, the U.S. tourist traffic is thus also the most lucrative for Kenya. Projections of growth trends in the tourist industry indicate room exists for substantial additional hotel capacity and promise good opportunities for hotel, game lodge, and beach resort investments as well as strong growth in sales of small aircraft.

The biggest projected tourist development in which U.S. firms may be interested is a 10,000-bed coast resort complex which the Government wants developed over the 1973-85 period. Total costs should run between $50 and $70 million. Development of new tourist circuits should also create demand over the next year or two for perhaps nine or ten 100-bed lodges, plus road and airstrip improvements, at a cost of $6 to $8 million.

In agribusiness, the most dramatic news is that the Government intends to spend $79 million over the next five years (on top of $10 million spent in the past five years), as part of a long-range plan to increase beef output and slaughtering and marketing facilities. This development program will greatly expand opportunities for sales of animal feeds and medicines, perhaps making the market large enough for local manufacturing investment.

Horticulture is another activity that offers good potential for large-scale investment. The base is small, but growing fast. The 5,123 tons of fresh horticulture shipped by air in 1971 should reach 9,000 in 1972 and 15,000 by 1974. Due to the climatic variety created by its wide range of altitude, Kenya can grow almost every kind of temperate zone crop as well as tropical produce. Production can also be phased to complement instead of compete with the growing seasons of other horticultural export countries. In addition to the export of fresh produce, there are opportunities for additional investment in processing operations such as freezing and dehydrating.

Rapid tempo

Public construction will continue its rapid tempo, and offers several possibilities for U.S. business. For example, the expansion of Nairobi airport will cost $47 million, of which $29 million will come from the World Bank. Although initial design contracts have already been let, it may not be too late for U.S. firms to participate.

Roads account for 30 percent of planned expenditures in the 1970-74 Development Plan, and actual spending may rise to about $220 million. Though more attention may be devoted to labor intensive construction of improved dirt roads, the outlook suggests a continuing demand for construction and maintenance equipment.

Coinciding with expansion of the oil refinery, an oil pipeline between Mombasa and Nairobi may be undertaken in the near future. Although the pipeline will probably be operated by a parastatal corporation, construction will be awarded to private firms on the basis of international tender.

Power consumption in Kenya is growing at 10 percent per year, with industrial demand rising 30 percent a year. Kenya's plans for additions to generating capacity to meet this demand provide good construction and equipment sale possibilities.

Although there seems to be less hope each year of achieving any true harmonization of industrial allocation within the East African Community—for example, both Kenya and Tanzania now have tire plants each of which could probably serve the entire East African market—there is a chance that certain necessarily large-scale projects could be built to serve a regional market. These include automobile and truck assembly, a chemical complex, and steel production. Impetus for such regional efforts may come from the East African Development Bank.

FIRESTONE'S NEW NAIROBI PLANT—*A Kenyan works at a tire-building machine in a factory opened by Firestone last year. Kenya welcomes foreign investors.*

Belgium's Current Upturn Brightens Market Outlook

As one of the world's leading trading centers at the crossroads of the expanding EEC, Belgium provides a competitive, but promising, market for a wide variety of U.S. exports.

Like its Western European neighbors, reports Edith L. Bruce, Commercial Officer at the U.S. Embassy in Brussels, Belgium recently experienced a slight slowdown in industrial growth; GNP expanded 4.2 percent in real terms in 1971 following a 6.1 percent increase in 1970. Industrial production and retail turnover statistics for the first five months of 1972, however, indicate that the economy is in a definite upturn. Salaries as a whole rose 12.8 percent in 1971, which stimulated increasing demand for consumption and leisure activity products. The overall cost of living rose 4.4 percent last year.

Price flexibility

The current outlook for continued wage and price increases, following a 12 percent appreciation of the Belgian franc vis-a-vis the U.S. dollar in December, provides flexibility for better price competitiveness or profit margins for sales of American products in the Belgian market. Competition from neighboring European suppliers nevertheless remains keen, especially with the anticipated expansion of the EEC, and its recent agreement eventually to extend free trade in industrial products to Austria, Finland, Iceland, Portugal, Sweden, and Switzerland.

The U.S. share of the Belgian import market has varied between 7 and 9 percent in recent years. During the first five months of 1972, however, Belgium imported BF 13.9 billion worth of American goods and services as compared with BF 16.9 billion during the comparable period in 1971, while total imports were increasing over the 1971 period.

This decline in the value of Belgian imports from the United States can be explained largely by two factors: 1) the 12 percent appreciation of the Belgian franc vis-a-vis the U.S. dollar at the end of last year, which has, in effect, reduced the Belgian import price of a number of U.S. products; and 2) a decrease in Belgian purchases of base metals, followed to a lesser extent by fewer purchases of electrical equipment and measuring and optical instruments.

If industrial production continues on its present upward course, Belgian demand for these industrial items should improve later this year. In the meantime, current Belgian imports of American chemicals, plastics, textiles, transportation equipment and agricultural products are up from last year's levels.

Overall Belgian exports to the United States have also declined slightly—totalling BF 15.5 billion during the first five months of 1972, as compared with BF 17.6 billion during the same period last year. This decline can at least partly be attributed to the effects of the Belgian franc appreciation, which has made it more difficult for Belgian exporters to sell at competitive prices.

Exporters seeking to enter the Belgian market are finding that sales prospects are brightest for certain specialized or high-technology products which are not already produced on a large scale in Europe. Recognizing, for example, that Americans have a lead in the development of anti-pollution technology, high level Belgian officials recently expressed interest in information on U.S. laws and techniques for handling pollution problems. While pollution control in Belgium is still very much in the planning stage, a Ministerial Committee headed by the Prime Minister has been recently established to set priorities to tackle this problem, which Belgium has in common with other industrialized, densely populated countries of Western Europe.

Following a Ministerial Committee decision to consider water treatment as a first priority, the Belgian Government allocated BF 1.5 to 2 billion (approximately $33.5 to $47 million) annually for the next 15 years for the construction of sewage and industrial wastewater treatment plants. For each sewage treatment plant, Belgian water basin authorities plan to choose individual contractors on an open bid basis to provide civil engineering plans, electromechanical equipment, sewage treatment technology, and sludge handling equipment.

Planned construction

The planned construction of motels and restaurants along an expanding network of Belgian expressways now under construction will provide opportunities for sales of restaurant and motel equipment. A special Commission under the Ministry of Public Works has plans for constructing 11 restaurants and 30 restaurant-motel establishments at 40 to 60 kilometer intervals between 1973 and 1980. The promoter responsible for the construction and eventual operation of each establishment is to be selected by competitive bid, based on: 1) the percentage of annual turnover that the promoter agrees to remit to the highway building fund; 2) the value of investment planned by the promoter; and 3) the promoter's financial reputation and the general conception of his plan.

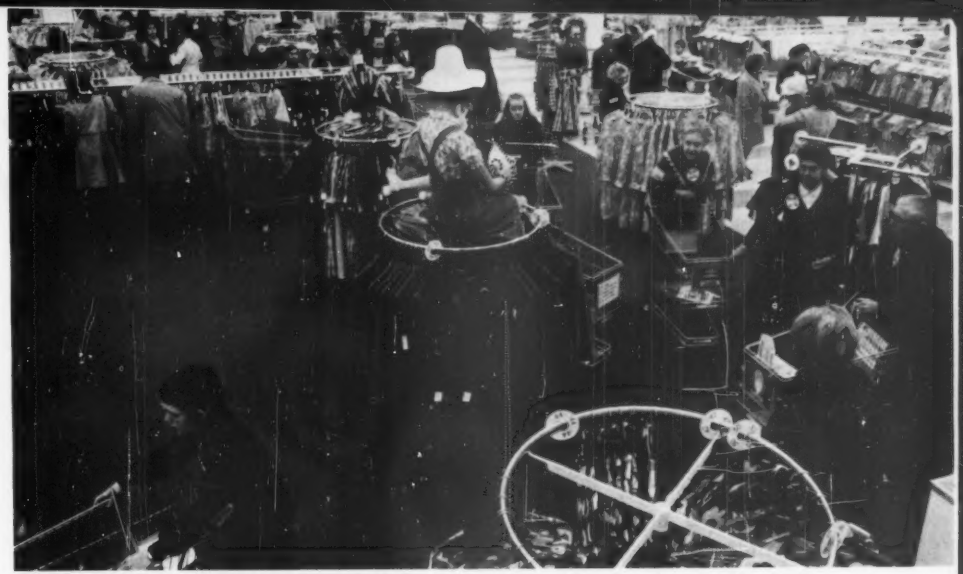
The Director-General of the Commission in charge of the project has indicated that American and other foreign firms could freely compete for selection as a promoter for a certain establishment,

either alone or in cooperation with a Belgian firm. The promoters, once selected, are then responsible for selecting subcontractors and suppliers. Promoters which have already been selected for two of the projects are expected to begin construction by the fall of 1972. Belgian authorities expect to select promoters for five additional projects later this year, and for between four to six projects in 1973.

Rising salaries and the continued expansion of travel by automobile have stimulated innovation in the Belgian market for consumer products. Although Belgium is traditionally a nation of small, independent shopkeepers, large self-service supermarkets established in recent years are capturing a growing share of retail sales. A recent survey indicated that self-service stores — including supermarkets, cooperatives and discount houses— accounted for 52.1 percent of Belgian retail food sales in 1971.

Going a step beyond the traditional supermarket has been the growth of giant full-service stores, offering a wide array of consumer goods, including food, small appliances, clothing, gardening equipment and automotive products. American companies have major interests in two of the three principal chains of full-service stores in Belgium, where it is possible to buy anything from a lawnmower to a frozen TV dinner.

Executives of a large U.S.-controlled store chain in Belgium have found that differences between the needs and tastes of the American and Belgian consumer have narrowed in recent years, which has made possible the successful introduction of a number of new American products on the Belgian market. Since acquiring a controlling interest in the chain in 1969, the U.S. company has opened several giant full-service stores, including ones in Antwerp and Waterloo which each provide 13,000 square meters of selling space and parking for 1,520 cars.



BELGIAN CONSUMERS—*The American-style supermarket has been enthusiastically received in Belgium. Managers of stores like the one above report success in introducing certain U.S. goods to the increasingly affluent Belgian consumers.*

While no attempt has been made to introduce American products on a massive scale, the company's executives have found that certain U.S. consumer products are beginning to sell well. They have noticed, for example, that sales of American power tools have climbed as the "do-it-yourself" craze has caught on in Belgium. American power lawnmowers are also selling well in Belgium for the first time.

Also selling well

Other American-made items which have successfully "caught on" include men's colored shirts, blue jeans and sportswear, and play equipment for children. In the food section, American canned fruits and certain types of frozen foods are selling well.

Executives of this chain have confirmed that the Belgian market for leisure-time and recreational equipment is expanding rapidly. While many customers for these products are undoubtedly among the 23,000 Americans living in Belgium, there has also been substantially increased sales of American products to Belgians and other foreigners living in the country. The company management therefore hopes in the future to expand further the number of U.S. consumer products sold in its Belgian stores.

Since camping is becoming increasingly popular in Belgium, there appears to be a growing market for trailers and other camping equipment. About 10,000 trailers per year are sold in Belgium at prices ranging from $900 to $5,200. As Belgians are becoming increasingly affluent, the market for higher-priced trailers is expanding, and American models selling for around $5,000 have recently been introduced in the Belgian market. In general, the Belgian buyer seems to prefer a trailer that can be hitched to a car.

In addition to the expanding consumer area, Belgian industry continues to provide a steady market for certain types of American products. The spread of automation in Belgian industry has created a market for electronic measurement and control instruments.

The author believes that marketing prospects are also promising for the following U.S. products: medical diagnostic and monitoring equipment, low-priced desktop electronic calculators, sophisticated electronic data processing equipment, electronic aviation instruments, municipal equipment, and high-quality prefabricated housing.

Living in a relatively small country engaged in a high volume of foreign trade, the Belgian industrialist or consumer readily accepts

foreign products. When confronted with the choice of buying from a European or an American supplier, however, the Belgian businessman will usually choose to buy from the European as a closer source of supply. Sales prospects are therefore brightest for American exporters offering products that are either unique, or competitive in terms of price and quality with those already available on the European market.

General market conditions in Belgium are expected to remain favorable as the country faces challenges of growth and modernization as the evolving capital of the EEC. Nearly 1,400 American companies have already established sales offices or manufacturing facilities in Belgium, and prospects appear promising for sales of additional American products to satisfy growing needs of consumers, industries and public authorities.

U.S. Regains Position As Top Kuwait Supplier

The United States regained its position as the top exporter to Kuwait in 1971 after being overtaken by the Japanese in 1970.

Government of Kuwait statistics for 1971 show U.S. shipments of more than $102 million followed by the Japanese with $99 million and the United Kingdom with $81 million. The rise of 30 percent over 1970 represents the first increase in U.S. exports to Kuwait since 1968.

This dramatic change was due in large part to a doubling of transport equipment purchases. For example, the U.S. share of the Kuwait passenger car market rose from 18 percent in 1970 to 32 percent in 1971. Dealers of American cars are meeting the Japanese and European competition by aggressive marketing and the introduction of smaller, less expensive models.

Other product categories showing increased sales in 1971 were cereals, chemicals, machinery and electrical household equipment.

Taiwan, Still Moving At Fast Pace, Continues To Be Attractive Market

The Republic of China is maintaining its fast economic pace and continues to be an attractive market for U.S. goods and to offer many investment opportunities.

During the first half of 1972, Taiwan's economy continued to enjoy vigorous growth. Barring any natural disasters (e.g., typhoons), real GNP is expected by the U.S. Embassy in Taipei to rise between 10.5 and 11 percent for the year.

Led by a booming construction industry, overall industrial production was up 27 percent in the first half, an all-time high. While nearly all industries shared in the rapid expansion, electronics was the standout in the manufacturing sector. This industry was first in both production and export growth and in time may surpass textiles as the island's most important manufacturing sector.

Foreign trade continued its rapid gains of the previous year. Total trade in the first half increased almost 40 percent, reaching a level of U.S. $2.7 billion.

Imports from the United States during the first six months increased by more than 40 percent. For the first time in many years, they surpassed those from Japan; present indications are that the growth rate for 1972 should surpass 30 percent.

U.S. exports during the past half year were paced by large sales of machinery and equipment. The "non-electrical machinery" category showed an outstanding increase of 240 percent, bringing total U.S. sales in this sector to $161 million. Principally responsible for this increase was nuclear power equipment.

Other items showing large gains during 1972 were refined petroleum products (up 230 percent) and farm products (up 51 percent). Moderate gains were also registered in the export of electronic supplies and equipment and chemicals; on the other hand, declines were noted in textile materials and ferrous and non-ferrous metals. The former, however, had shown abnormally large growth in 1971.

Textiles remained the main export from Taiwan to the United States ($142 million). The largest gain was registered by electronics, however, primarily TV sets and components; total exports of electronic products reached $134 million.

Indications are that U. S.-Taiwan trade should continue to expand vigorously over the next few years and may possibly surpass the $4 billion level by the end of 1975. The increased emphasis on heavy industry envisaged under the sixth Four-Year Plan will require extensive outlays for heavy capital equipment, machinery, and engineering services. In addition, the plan calls for rapid development of transportation and communication facilities to strengthen the economic infrastructure.

Specific items noted in the Plan include: expansion and improve-

KEELUNG YARD—*The Taiwan Shipbuilding Corp. has built three 100,000-ton tankers at this yard near Taipei.*

ment of Keelung and Kaohsiung harbors; construction of a new harbor at Taichung; construction of Taoyuan International Airport; establishment of an airmail processing center and mechanization of parcel and mail processing; procurement of new air navigation, meteorological and microwave systems; and continued expansion of highways.

Moreover, indications are that increased attention will be given to pollution control in future years. The tariff on pollution control and water treatment equipment has been slashed almost 50 percent. The Taipei City Government is reported working on a pollution control program and the Provincial Government is also undertaking measures to reduce the high levels of pollution throughout northern Taiwan.

Advantageous position

With the recent currency realignments and the hesitancy of the Japanese Government to provide adequate credit arrangements, American suppliers are now in an advantageous position to satisfy many of these requirements.

Moreover, with a population of over 15 million (more than Australia) and rapidly rising personal incomes, the Taiwan market should also provide increasing opportunities for expanded sales of consumer goods.

Although some uncertainties have arisen over the past year, the balance of factors still is favorable for foreign investors. Plus factors include an absence of economic nationalism, a stable domestic political scene, a growing and educated labor force (nine-year education is free on Taiwan), a positive work ethic, stable unit labor costs, a comparatively stable price level, a strong currency backed by large foreign exchange holdings, as well as many positive tax and investment incentives.

Devaluation problems, labor disputes, and nationalization threats are conspicuous by their absence. Despite basically low labor costs, it should be pointed out that real wages have, according to one international source, increased 20 percent over the past three years enabling the work force to share in the benefits of economic growth. Rapidly rising productivity, however, during the same period held the increase in unit labor costs in manufacturing to 4 percent.

In June the Government decided to ease certain restrictions on foreign investment to improve further the investment climate. Major points under the liberalization measures include: permission to import capital equipment even though it is available in the domestic market and to import a six months supply of raw materials on the restrictive list provided they are imported specifically for the investment project; permission in certain cases to convert investment loan funds (as distinct from equity investment) into local currency to meet costs of expansion; greater flexibility to investing firms in meeting the percentage of total production required for export; a relaxation on terms and conditions covering royalties for technical cooperation; and more liberal consideration of foreign investment proposals which might compete with domestic enterprise.

The Council for International Economic Cooperation and Development, in conjunction with the Ministry of Economic Affairs, published in June a new list—though not an exclusive list—of foreign investment opportunities which cover a wide range of industries. While the detailed listing is beyond the space of this report, the following ten principal industry categories are included in the list: basic metals, machinery, transportation equipment manufacturing, electronics, electric machinery and apparatus, chemicals, plastic and synthetic resins, man-made fibers, food processing, and "other" manufacturing industries.

Uruguay Economy May Be Emerging From Long Slump

While Uruguay continues to suffer from a prolonged economic recession, some underlying economic trends have begun to move upward.

The Government has embarked on an economic policy of stabilization and reform which, if successful, will allow the country's natural economic advantages to bring recovery and growth. World prices for beef, wool and hides, the major products of Uruguay, have been steadily increasing, and prospects for the approaching tourist season are good. An internal problem of security has lessened in the past six months, as combined police and military forces have arrested many of the terrorists and uncovered many of their hideouts.

Serious problems remain

Serious problems remain, however. Commercial arrearages have continued to accumulate, and there is widespread labor and business discontent as wages and profits have been squeezed by the need to fight against inflation. A four-month ban on domestic sales of beef and a shortage of beef substitutes have brought consumer complaints. The balance of payments situation is unclear, but continued deficits appear likely.

These short-term problems, however, may ease in the long-term. After reports chronicling the steady deterioration of Uruguay's economy, the U.S. Embassy in Montevideo now takes a position of cautious optimism.

In June exports finally passed imports, providing a small trade surplus for the first six months of the year. With the wool clip now under way, and the tourism season starting in December, and hopefully a continued high level of beef exports, the trade account is ex-

pected to be in surplus for the year.

Imports have been restrained, with quotas reduced below the levels of 1971. Some industries reportedly have slowed production because of raw material shortages which have been exacerbated by the refusal of some suppliers to ship goods to Uruguay until long overdue import debts have been settled. The inability of the Uruguayan Central Bank to provide foreign exchange for import payments has evidently, though not intentionally, affected the import level.

While statistics are not available on the balance of payments results so far in 1972, the continued increase in commercial arrearages indicates that there has been little improvement so far over 1971, when the payments were in deficit $38.2 million. However, some trends in 1972 appear to be moving in the opposite direction from the serious deterioration posted in the second half of 1971. As of June 30, international reserves were reported at $197.3 million against liabilities of $172.1 million, although the latter figure does not include commercial arrearages.

The outlook for the year is for some improvement, but unless there are further increases in world beef and wool prices the payments will again be in substantial deficit. The corner may be turned by the first quarter of 1973, if the stabilization policy continues and is successful.

An excellent tourist season in 1971-72 and prospects of an even better one in 1972-73 have led to resumption of construction activity in Punta del Este, Uruguay's paramount seaside resort, which is slowly acquiring the configuration of Miami Beach. The Government is placing increasing emphasis on tourism, and the industry has a high growth potential over the next decade.

New development

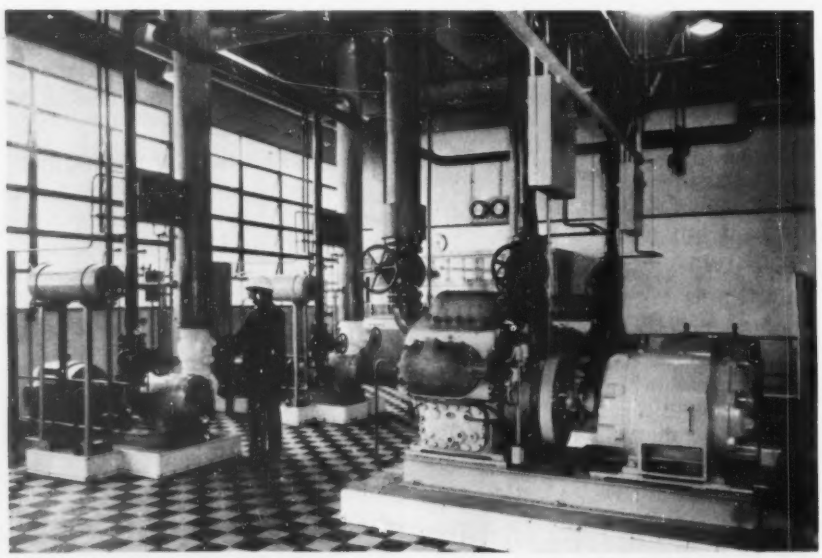
While a large amount of investment interest has been expressed in the fishing industry, this is a relatively new development in Uruguay, and there appears to be some confusion as to how to proceed. There is a traditional consumer resistance to fish among the beef-oriented Uruguayan public. A modern fish processing terminal has been built recently in Montevideo (30,000 metric tons annual capacity) but there is a shortage of fishing boats, and no modern dock facilities exist. The large world demand for fish and the fertility of Uruguay's offshore waters should make it possible to develop a significant new export industry.

An industrial promotion law has been prepared and reportedly will be sent to the legislature in the near future. A proposal for a development bank is also under study. It appears that the Government may offer a share of future production to companies willing to risk drilling for oil in surveyed offshore areas which have promising geological structures.

Construction of the joint Argentine Uruguayan Salto Grande hydroelectric dam will probably begin in 1973. A second international bridge across the Uruguay River at Fray Bentos to Argentina is about to be started, and the first bridge across the river at Paysandú should be completed in 1973. More tentative projects are a petroleum buoy and tank farm and the Palmar hydroelectric dam on the Rio Negro River.

As Uruguay's economy recovers, U.S. exporters might begin to give renewed attention to the country in their marketing plans. Admittedly, this prospect is difficult to perceive in a period of prolonged delays in payment for previous sales and rigorous import controls. However, since the new Government is attempting to settle these arrearages as soon as possible and is set on an announced policy of economic reform, by the second half of 1973 Uruguay may again be a good customer for American goods and services and a place of attractive investment opportunities.

Uruguay continues to enjoy a high standard of living and is situated on the border of Southern Brazil, the fastest growing market on the continent. Those companies that have stayed with this market during its troubles, and those who are prepared to enter into the market during its early recovery period, will be well placed to benefit from future growth.



HOPEFUL SIGN FOR URUGUAY—*Continued high levels of beef exports may help get the economy moving again. Above, a modern meat packing plant in Montevideo.*

World Trade Actions

Bangladesh Improving Its Ability To Pay For Imports

Bangladesh: The capacity to finance imports from its own resources has improved markedly since the country attained independence last December. Foreign exchange reserves stood at only $9 million in December, and with exports disrupted as a result of the 1971 hostilities, non-aid imports were sharply restricted during the first six months of this year. Export earnings resumed on a substantial scale during this period, however, and in combination with the continuing tight restrictions on non-aid imports raised official reserves to $146 million by mid-July.

Reflecting this improved reserve position and an optimistic export outlook for Fiscal 1972 (which began July 1), the new import policy for July-December 1972 substantially relaxes restrictions (see *Commerce Today*, July 10, Page 57). Some $230 million is allocated for non-aid financed imports during this licensing period—$138 million for industrial imports, $72 million for commercial importers, and $20 million for foodgrains—a near tripling of the Jan.-June allocation.

The list of permissible imports in the current policy is expanded to 374 items, compared to 259 in the previous policy. This list is divided into two parts—228 product lines for industrialists (with an array of raw materials and components allowed for each) and 146 for commercial imports. Industrial importers will be licensed for raw materials, components, and spares at 100% of their entitlements (based on demonstrated production requirements). Although this same provision was contained in the previous policy, industrialists were generally limited to imports at 50% of entitlement in the Jan.-June period. As an incentive to export, the new policy introduces a Raw Material Replenishment Scheme under which 23 export-oriented industries can obtain additional import entitlements equal to a prescribed percentage of the f.o.b. value of their exports.

Actual users (e.g., hospitals, doctors, universities) continue to be allowed to import for their own use such items as scientific, technical, and text books; laboratory glassware; electromedical apparatus and appliances; scientific instruments, apparatus and appliances; optical instruments; homeopathic and biochemic medicines; personal-use medicines not available locally; x-ray films and plates; and artificial limbs and hearing aids. The ban on imports of many luxury items continues.

Imports will be permissible only against irrevocable letters of credit, with the following exceptions: books and journals (sight drafts permissible); and drugs and medicines at a flat rate of 500 takas ($68.69) to meet urgent requirements (sight draft or deferred payment allowed).

The scope of state trading is materially increased in the current policy (see July 10 article for the initial list of items under state trading). Three items previously reserved for private importation—cotton textiles, woolen fabrics, and petroleum, oil, and lubricants—have been added to the previous lists of essential industrial materials to be imported exclusively by the Trading Corp. of Bangladesh (TCB), the government's state trading agency. Imports of commercial vehicles, previously shared by TCB and the private sector, also now become a TCB monopoly.

The joint TCB/private sector import list is also extended by the addition of some 20 items previously left to private importers, including drugs and medicines, dry cell batteries, spices, tires and tubes, yarn and thread of man-made fibers, printing ink, domestic sewing machines, photographic film, dyes and other chemicals for handlooms and tanning, knitting wool, condensed milk, razor blades, toothbrushes and tooth paste, and flashlights. Several other items will be imported by government agencies other than TCB—airplane parts, coke, cinematographic film (exposed and unexposed), fertilizer, insecticides and pesticides, soda ash, sugar, and rice, jute, and potato seeds.

For specific information on Bangladesh's import policy, write to the Near East-South Asia Division, BIC-896, U.S. Department of Commerce, Washington, D.C. 20230. Please include the Brussels Tariff Nomenclature, the U.N. Standard International Trade Classification, the U.S. Schedule B export commodity number, or a complete product description.

Taiwan: The Executive Yuan has enacted a new Trademark Law which entered into force on July 4. It replaces the 1930 Law, as last amended in 1958. The basic changes in the new Law are: (1) exclusive trademark rights based on first registration, not first use; (2) opposition period for applications shortened from six to three months after publication; (3) registration duration shortened from 20 to 10 years from registration date, renewable for like period; (4) civil and criminal penalties provided against infringement; and (5) registration and protection of service marks. Foreigners having no domicile or place of business in Taiwan must appoint a local attorney to handle their trademark application filings and other prosecutions under the law. Trademark licenses are subject to Government approval under conditions

established by the Ministry of Economic Affairs based on economic development needs.

Trademark registrations may be canceled, if the Government later determines *ex officio*, or at the request of an interested party, that the mark has been changed to simulate another's mark for the same goods, or that it has not been used for one year following registration, or that use has been discontinued for two years. Not registrable as trademarks are those identical with national emblems or flags and international names or symbols, such as the United Nations and Red Cross. Marks identical to "famous marks" owned and used abroad by others are unregistrable under the law. Also unregistrable is a mark similar to one already registered in Taiwan for the same goods, if the existing registration is less than one year old. This does not apply where the registration has been in disuse for more than one year. Further information on the law may be obtained from the Foreign Business Practices Division, BIC-879, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2828).

Colombia: The Government has submitted draft legislation to Congress requesting authority to implement the Andean Foreign Investment Code (AFIC) and to issue the implementing regulations. Meanwhile, the Government has changed the existing Colombian investment regulations to bring Columbian treatment of foreign capital as close as possible to the AFIC regulations. Under the new legislation, only new foreign firms which desire the duty reductions available under the Andean Common Market must follow the disinvestment regulations contained in the AFIC. Under the AFIC regulations all new firms and existing firms trading in the Andean market were required to disinvest. There are no industries named for special restrictions and no credit restrictions are applied to foreign enterprises, as was done under the AFIC regulations.

Technical assistance regulations in the new legislation are also less restrictive than under AFIC. There is no prohibition of royalty payments between a parent company and an affiliate. Restrictive contract clauses are not prohibited, but are to be given consideration by the Royalty Committee when the contract is reviewed for approval. Management contracts must include provision for the progressive participation of nationals. Likewise, the participation of nationals in management in a new venture will be a factor in gaining Planning Department approval of new investments. The Government has indicated that as soon as the constitutional questions are resolved it will reimplement the more stringent AFIC regulations, and there has been no indication that changes in the AFIC regulations are being considered.

Resolution No. 17, of July 19, concerns foreign investment definitions and provisions, while Decree No. 1234, of July 18, treats patents, royalties and other technology transfer questions. An English synopsis of both decrees and the Spanish text are available on loan from the U.S. Department of Commerce, BIC-886, Washington, D.C. 20230.

Jordan: The brightened economic outlook, coupled with a return of political stability, has brought a resurgence of private business confidence which offers commercial opportunities to U.S. interests. Agriculture, still the mainstay of the economy, has yielded abundant harvests this year. Wheat and barley crops have been especially good, eliminating the need for imports of PL-480 wheat and flour this winter. U.S. exports of wheat and flour to Jordan in 1971 totaled over $4 million. Jordan's traditional imbalance of trade also shows signs of improvement as tourism, the main foreign exchange earner prior to 1967, is reviving and exports of phosphate and cement have increased.

Renewed confidence on the part of private investors has led to several investment opportunities in the industrial and financial sectors. After completion of a feasibility study the newly formed ceramics company is presently seeking a foreign partner. Other industries being considered for investment include a glass factory, a tire and rubber plant, and a detergent and disinfectant factory. The financial environment in Jordan presents an excellent opportunity for a commercial bank to establish a branch.

Trade opportunities include large joint venture construction projects and smaller projects with Jordanians acting as agents. Construction projects being explored include a government office complex, housing projects for the Jordan Electric Co. and Jordan University employees, a mineral water basin and a tourist center along the Dead Sea. In addition, the government's efforts to increase the use of Jordan's only port, located at Aqaba, have been successful and expansion of the port can be expected upon implementation of the new three year development plan (1973-75) which is expected to be announced shortly.

Along with the improved market for imports, the Jordanians have indicated a strong preference for U.S. products and services and are eager to buy and sell American. Therefore, representatives of U.S. companies traveling in the area may find it profitable to visit Jordan.

Nigeria: U.S. exporters of whiskey and gin should be aware that Nigeria requires importers of such goods to have a valid import license. If no license has been issued the goods are confiscated by Nigerian customs without compensation to the exporter. Arrangements to transfer the shipment or re-export it are not allowed. U.S. exporters of whiskey and gin should therefore be certain that their importer in Nigeria has a valid import license for these items before making shipment.

International Business Reports

USA-USSR Trade: Prospects, Procedures, and Practical Suggestions. Published by the Seattle World Trade Club. $5.

This is both an edited transcript of a one-day seminar on U.S.-USSR trade held recently in Seattle, and a compendium of data for businessmen interested in Soviet trade.

The seminar was held concurrently with Washington State's UNIMART 72. Speakers from the United States, Europe and the Soviet Union discussed joint ventures; intermediaries; grain markets; licensing; and export and import trade. A Soviet Ministry of Foreign Trade official answered questions on "needs of the Soviet Union" and how the Western businessman can satisfy them.

An appendix provides background information on the Soviet economic system and gives five-year Soviet trade statistics with Europe, North America and Japan. Also included is a "road map" to help businessmen determine with whom, where, and how to make contact, and a short bibliography.

Write: The Seattle World Trade Club, P.O. Box 12688, Seattle, Wash. 98111.

Worldwide Survey of Bilateral Payments Agreements and Clearing Settlement Procedures. Prepared by the Institute on Switch and Barter Trade, a division of International Reports, Inc. $55.

This fully updated and expanded survey covers 95 countries which maintain bilateral payments agreements—82 in the western world plus 18 east bloc countries. Designed as a tool for foreign traders seeking new markets for their goods and those wishing to reduce costs of imports, it shows how exporters may finance additional sales to countries with foreign exchange shortages by accepting payment in bilateral clearing funds which can be sold at discount rates against convertible currencies, and importers may reduce costs of imports by arranging payment in bilateral clearing funds bought with convertible funds at discount rates. According to this study, switch trade, based on the multilateral use of bilateral clearing funds by both importers and exporters, will become a major factor in international trade if the current trend towards more convertibility restrictions in many countries should continue.

Write: International Reports, Inc., 200 Park Ave. South, New York, N.Y. 10003.

Current Development Projects in Australia. 104 pp. $12.

This is a survey of major development projects at the planning, tendering and contracts let stages throughout Australia from Jan. 1 to June 30, 1972. It contains details of some 1,500 separate projects each valued in excess of $500,000. Also included are indexes of architects, consulting engineers and builders and contractors.

Write: John Jackson & Associates Pty. Ltd., P.O. Box A771, Sydney South, N.S.W. 2000, Australia.

Calendar For World Traders

Oct. 5—New York—International Industrial Marketing Club luncheon meeting on the Far East. Chemists' Club, 11:45.

Oct. 5 & 12—Chicago—Seminar on principles and techniques of exporting, LaSalle Bank Bldg., 9 a.m.-5 p.m. Sponsor: International Trade Club.

Oct. 5, 12, 19 & 26—Memphis—Export educational seminar, College of Bus. Ad., Memphis State U. 7-9 p.m. Peter M. Flanigan, Asst. to the President for International Economic Affairs, will address the Oct. 26 session.

Oct. 9-10—Los Angeles—China Trade Symposium, sponsored by the U. of Southern California. Century Plaza Hotel.

Oct. 11—New York—FCIB Publishers Export Credit Group dinner meeting. Advertising Club, 4 p.m.

Oct. 11-13—New York—Second conference on international organizations and the international businessman, World Trade Center. Sponsor: World Trade Ins.

Oct. 12—Chicago—Luncheon and meeting of Overseas Automotive Club, Holiday Inn, O'Hare Airport.

Oct. 13—Omaha—Midwest International Trade Conf., New Tower, 1:30 p.m. Sponsors: REEC, Midwest International Traders Assn.

Oct. 17—Memphis—Port of New Orleans Conf., Sheraton Motor Inn. Sponsor: World Trade Club.

Oct. 18—Chicago—Eximbank conference on export and import financing. Sponsor: Commerce Field Office.

Oct. 18—Little Rock—Port of New Orleans Conf. Sponsor: Arkansas Exporters' Roundtable.

Oct. 19 — Chicago — Monthly luncheon of International Trade Club, Sheraton-O'Hare Motor Hotel.

Oct. 27—Memphis—Workshop on Japan, Robilio's Cafeteria. Speaker: Tatsuo Miyakawa, BIC.

Oct. 27-28—New York—Seminar on the problems of investing in developing countries. Americana Hotel. Sponsor: Practicing Law Institute.

Oct. 29-Nov. 1—Paris, France—Symposium on foreign competitiveness in the U.S. marketplace, Meridien Hotel. Sponsor: International Marketing Consortium, 295 Madison Ave., N.Y. 10017 (212-683-0400).

Oct. 30-Nov. 2—Amsterdam, Netherlands—Airline reliability and maintenance data systems workshop. Sponsor: Aero Data Inc., Syosset, N.Y. (516-364-0498).

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies and appoint agents, details on major construction and expansion projects and notices of U.S. visits by foreign buyers.

U.S. Promotions Overseas

BRAZIL, COLOMBIA, VENEZUELA. Aviation Equipment Trade Mission. Nov. 6-18. Products to be promoted are equipment requirements for upgrading international airport facilities, air-ground instrumentation and all types of general aviation equipment. Call Stanley Hays, 202-967-4927.

MEXICO. Metallurgy Equipment and Instrumentation Trade Mission. Nov. 13-22, Mexico City, Monterrey, Quetetaro. Considerable investment is planned for the Las Truchas steel plant in northern Mexico. Call 202-967-3904.

SWEDEN. Cryogenic Equipment. U.S. Trade Center, Stockholm, Nov. 20-22. Many sectors of the Swedish economy have a strong interest for cryogenic equipment for food processing and handling, industrial testing and production techniques, and the handling and storage of liquified gases. Call your nearest Commerce Field Office.

PHILIPPINES, HONG KONG, KOREA. Metalworking and Plastics Production Trade Mission. Nov. 27-Dec. 6. Both the metalworking and plastics industries in these countries appear to have good prospects for the sale of U.S. equipment. Potential customers in the region are most interested in metal fabrication and a wide range of control, test and monitoring equipment. Call Charles E. Johnson, 202-967-4464.

BAHRAIN, KUWAIT, SAUDI ARABIA, UNITED ARAB EMIRATES. Building and Construction Equipment Trade Mission. Nov. 29-Dec. 20. Product categories limited to building construction equipment and supplies, highway and road construction equipment, construction tools. Phone H. Socks, 202-967-3904.

ALGERIA, MOROCCO, LEBANON. Trade Mission. Jan. 15-26, 1973. Coupled with a Seminar; designed to tap into an Agribusiness Equipment market of $50+ million. Call 202-967-3904.

UNITED KINGDOM. Hotel and Restaurant Equipment. U.S. Trade Center, London, Jan. 22-26, 1973. Britain, home of Europe's largest international exhibition of hotel and restaurant equipment, is prominent as a European center for new concepts and products in catering. Call Geoffrey Gwaltney, 202-967-3848.

FRANCE. Printing & Bookbinding Equipment. Paris Trade Center, Jan. 23-27, 1973. Rising labor costs in France are leading to new, more efficient methods. Wages in French industry increased nearly 11 percent in 1971. In 1971, imports of printing and binding equipment reached $63 million. The United States supplied 10.7 percent of the total. Call Sam Spaulding, 202-967-3968.

SCANDINAVIA. Electronic Components. Stockholm Trade Center, Jan. 29-Feb. 3, 1973. Scandinavian production of electronic equipment is projected to resume a strong growth pattern in the next four years. This will stimulate a substantial growth in imports of components, which in 1971 accounted for nearly three fourths of the estimated $230 million component market in the four-country area. Call A. J. Beiring 202-967-3838.

THAILAND. Industrial, Scientific, and Test and Measuring Instruments Exhibition. Bangkok, U.S. Regional Trade Development Center, Jan. 29-Feb. 2, 1973. Thailand imported $8.2 million of instruments in 1970. Based on conservative estimates of economic growth, this figure is expected to reach at least $14 million by 1975. U.S. instrument exports to Thailand in 1970 were $2.5 million. Call Irvin Lloyd, 202-967-3783.

ITALY. Industrial Electric Power Systems Exhibition. Milan Trade Center, Feb. 6-10, 1973. Market research projects that Italian industry will purchase $254 million worth of electrical power generating and related equipment during 1973. Expected government building projects along with increased construction of industrial plants, hospitals and petrochemical plants will require inputs of electrical power generating systems. Call Noel Negretti, 202-967-4941.

NORTHERN EUROPE. Data Processing Equipment. Olympia, London, Dec. 4-8, 1972. Frankfurt Trade Center, Feb. 12-16, 1973. These exhibitions will be staged to acquaint United Kingdom and West German end-users with the latest equipment, accessories and software available in the United States. The U.S. exhibition at COMPUTER '72 will emphasize business applications. The specialized Minicomputers show in Frankfurt will cover the entire spectrum of EID uses. Call C. Edward Walls, 202-967-4256.

JAPAN. Commercial Laundry and Dry Cleaning Equipment. Tokyo Trade Center, Feb. 12-17, 1973. Japan is one of the fastest growing markets in the world for laundry and dry cleaning equipment. Consumption will be almost $29 million in 1973. Imports are growing 20 percent a year. Demand is for large scale, high speed equipment. Call Randall Miller, 202-967-4918.

IVORY COAST, LIBERIA, NIGERIA. Trade Mission. Feb. 12-23, 1973. This mission is designed to take advantage of the great need and demand in these countries for Food Processing and Packaging Equipment. Call 202-967-3904.

AUSTRALIA. Industrial Process Control — Analytical Instrumentation. Sydney Trade Center, March 5-9, 1973. Prospects for sale of U.S. process control equipment and related instrumentation are especially bright in Australia. Demand continues to be spurred by strong growth in the mineral processing, chemicals, electrical power and natural gas industries. Call John Klingelhut, 202-967-5751.

UNITED KINGDOM. Industrial and Commercial Security Equipment. U.S. Trade Center, London, March 5-9, 1973. The United Kingdom represents a $400 million market for a wide variety of security and fire protection equipment. Research indicates a growth rate estimated at 20 percent annually. Call William S. Gaines, 202-967-4073.

JAPAN. Industrialized Building Exhibition. Tokyo Trade Center, March 5-10, 1973. This exhibition is planned to capitalize on the Japanese Construction Ministry's current five-year home construction plan which calls for the construction of 9.5 million houses by 1976. Call Maurice A. Shea, 202-967-4511.

SWEDEN. Metal Parts Production Equipment. U. S. Trade Center, Stockholm, March 5-10, 1973. Metalworking is Sweden's largest industry. In 1969, its output exceeded $6 billion, constituting more than one third of all industrial production. Call C. E. Walls, 202-967-4256.

FRANCE. Data Communications Equipment Exhibition. Paris Trade Center, March 12-16, 1973. This exhibition will feature data transmission and storage computers, terminals, teleprinters, teletypewriters, message switching equipment, data multiplexing equipment, test and measurement instrumentation and sub-assemblies. Other equipment with market potential includes keyboards, data channel expanders, modems input-output devices, plotters, data security and privacy equipment, and facsimile transmission equipment. The French market for data communications equipment is expanding at an annual rate of 50 percent. The United States now is the largest supplier; in 1970, almost $5 million of data communications equipment, $9 million of test instrumentation, and $6 million of subassemblies were exported from the United States to France. Call Bob Wallace, 202-967-4508.

ITALY. Apparel Manufacturing Equipment. Milan Trade Center, March 12-16, 1973. A steadily expanding market, combined with an improving rate of exchange

between the dollar and lira, provides American firms with a unique opportunity for sales of high technology, mass production garment-making equipment. With equipment purchases averaging $40 million yearly and an expanding economy, prospects for sales in the Italian market are bright. Call Don Johnson, 202-967-2795.

JAPAN. Printing and Bookbinding Equipment and Graphic Arts. Tokyo Trade Center, March 16-19, 1973. Japan is a significant importer of printing, bookbinding and graphic arts equipment, purchasing in 1971 $45 million from overseas sources. Some $11 million came from the U.S. Market research indicates that 37 separate items in five principal categories have high sales potential in Japan. Call Robert Levine, 202-967-4705.

BRAZIL. Graphic Arts Packaging Exhibition. March 19-25, 1973. Some 50 U.S. exhibitors will display graphic arts and packaging equipment in twin international exhibitions held in huge Anhembi Park in Sao Paulo by the top fair organization in Brazil. Last year Brazil's economic growth rate was 11.3 percent. Call Porter Clary, 202-967-5768.

LEBANON, KENYA. Trade Mission. March 19-30, 1973. This is a specialized mission designed to capture a greater part of the expanding market for equipment and services related to tourism. Call 202-967-3904.

INDIA. Railroad and Rapid Transit Equipment Trade Mission. March, 1973, Bangkok, Calcutta, Delhi, Madras. Designed to increase the approximately 25 percent U.S. share of this over $20 million Indian market. Call 202-967-3904.

TAIWAN, THAILAND, SINGAPORE. Pollution Control Equipment Trade Mission, March 1973. Emphasis is on manufacture, engineering, and technical consulting pertaining to systems in air, water, solid waste and sewage disposal. Call Larry C. Cozart, 202-967-2051.

UNITED KINGDOM, NETHERLANDS, NORWAY. Catalog Show and Trade Mission. March, 1973. American Oil Equipment Manufacturers and Service Companies have an opportunity to show catalogs at the Offshore Scotland Exhibition in Aberdeen. Call Al Caya, 202-967-2120. An additional opportunity to explore the possibilities in North Sea Oil is open to 8 to 12 companies to join a Trade Mission to the United Kingdom, Netherlands and Norway. Call Stan Hays, 202-967-4927.

KUWAIT, UAE, SAUDI ARABIA. Trade Mission. April 2-13, 1973. Rapidly increased oil revenues and governmental commitments to health services auger well for this Hospital-Medical Equipment Mission. Call 202-967-3904.

FRANCE. Hotel and Restaurant Equipment Exhibition. Paris Trade Center, April 9-13, 1973. The market for this type of equipment in France is exceptionally strong. The expansion and modernization of hotels and catering establishments, including the provision of large volume and quick-service feeding facilities, continues to provide special investment incentives in this field. Imports still account for about one half of total sales. Call Jeff Gwaltney, 202-967-2888.

UNITED KINGDOM. Electronics Test and Measuring Instruments. U.S. Trade Center, London, April 9-13, 1973. Inflationary pressures in the United Kingdom have made cost effectiveness the principal consideration in the purchase of electrical-electronics measuring and test instruments. Call Lee W. Swift, Jr., 202-967-4461.

SINGAPORE. Industrial, Scientific, Test and Measuring Instruments, April 9-14, 1973. Singapore imported $14 million in instruments in 1971--projected to reach $24 million by 1975. The U.S. exported $8.3 million in 1971, and was Singapore's largest supplier. Call Irvin Lloyd, 202-967-3783. To be held in conjunction with **Electronic Data Processing, Reprographic and Office Equipment Exhibition.** U.S. exports of this equipment jumped from slightly under $1 million in 1967 to more than $12 million in 1971. Markets in Southeast Asia for Electronic Data Processing Equipment are continuing to expand at a very rapid rate. Call Thomas Padgett, 202-967-4727.

SINGAPORE. Construction Equipment, Building Products, Logging, Forestry, Sawmill and Woodprocessing Equipment Exhibition. April 9-14, 1973. Concomitantly, **Logging, Forestry, Sawmill and Woodprocessing Equipment Trade Mission** beginning in Philippines, April 2, 3, 4; moving to Malaysia, April 5, 6, 7; and culminating in Singapore at the above mentioned exhibition. Call LoRee P. Silloway, 202-967-4858.

SWEDEN. Materials Handling Equipment. U.S. Trade Center, Stockholm, April 9-14, 1973. The Nordic markets for these products total an estimated $450 million, of which imports supply one-third. Programs are now under way, and more are planned, to modernize and rationalize production, internal transportation packaging and storage operations. Call your nearest Department of Commerce Field Office.

USSR, POLAND, AUSTRIA, YUGOSLAVIA. Food Processing and Packaging Machinery and Equipment Trade Mission. April, 1973. These countries are good prospects for modern automated equipment, especially in the processing and packaging of meat for export and of speciality and convenience foods for the Hotel Industry. Membership will be limited to 12 firms. Call 202-967-3904.

PERU, ECUADOR, BOLIVIA. Light Industrial Equipment for Mining and Construction Industries Trade Mission. April, 1973. Oil and gas developments in these countries are expected to increase the market. Call 202-967-3904.

NORWAY. Nor-Shipping '73. Oslo, May 9-15, 1973. The fourth international shipping exhibition offers U.S. companies an excellent opportunity to promote their products to Scandinavian users of shipbuilding, marine, cargo, and port equipment. Call A. J. Beiring, 202-967-3838.

GERMANY. Interpack '73. Duesseldorf, May 10-16, 1973. This is the largest specialized packaging exhibition in the world. Consumption of packaging machinery in West Germany reached $74 million in 1971, up 11.6 percent over 1970. Call William S. Gaines, 202-967-4073.

JAPAN. Analytical Instruments for Science and Industry. Tokyo Trade Center, May 14-19, 1973. Japan is a $100 million market for analytical instruments for science and industry. Consumption is expected to rise 30 percent annually over the next few years. High sales potentials exist for a broad range of instruments and equipment. Call your nearest Department of Commerce Field Office.

INDIA. Agriculture-Irrigation Equipment Trade Mission. May 14-25, 1973. Bombay, Chandigarh, Delhi, Lucknow, Hyderabad. This mission seeks to capitalize on the $35.9 million Indian market. Call 202-967-3904.

ITALY. Minicomputers and Related Peripherals Exhibition. Milan Trade Center, May 15-19, 1973. The market for U.S. minicomputers is expanding at 30-40 percent annually, and is wide open. Sales are expected to reach $10 million in 1975. Italian EDP users are moving from large systems to smaller, specialized ones, and U.S. manufacturers should move now to establish themselves in this growing market. Equipment to be exhibited includes minicomputers and all EDP peripherals designed for use with minicomputers. Contact Don Johnson, 202-967-2795.

MEXICO. Pulp, Paper and Conversion Equipment, Mexico City Trade Center, May 21-25, 1973. Rapidly expanding pulp and paper industries form attractive sales targets in a nearby market. Call Jim Blow, 202-967-4311.

JAPAN, AUSTRALIA. Trade Mission. May, 1973. Will include equipment and systems for the industrial uses of natural gas. Increased use of natural gas for industrial applications will help diversify Japan's energy sources which presently are heavily dependent on petroleum from the Middle East, and reduce pollution arising out of its use. Coupled with the introduction of natural gas to Melbourne in 1971, and scheduled introduction into Sydney in 1974, these developments open new opportunities for U.S. industrial equipment. Call 202-967-3904.

Sales opportunities in 10 U.S. commercial exhibition, 23 shows at the 10 U.S. Trade Centers, and 19 Trade Missions are being offered to present and potential U.S. exporters between now and June 1973.

Each Trade Center exhibition is limited to one particular line of products and centers are located in Bangkok, Buenos Aires, London, Milan, Mexico City, Frankfurt, Stockholm, Sydney, Tokyo, and Paris. For further information on the Trade Center shows described or for more facts on U.S. exhibitions, **write:** *Foreign Export Promotion, BIC-936, U.S. Department of Commerce, Washington, D.C. 20230.*

Trade missions are groups of U.S. businessmen organized to travel abroad promoting the export of U.S. goods and services made by their particular industry. **Write:** *Trade Missions, BIC-940, U.S. Department of Commerce, Washington, D.C. 20230.*

SAUDI ARABIA, UAE, KUWAIT, GREECE. Trade Mission. May, 1973. These countries are anxious to better their airport facilities and are backed by ample hard currency revenues or international project loans. U.S. industry should have a competitive edge in marketing. Call 202-967-3904.

FRANCE. INOVA '73—Design Engineering, Industrial Components and Subassemblies. Paris, June 2-8, 1973. The automotive, aerospace, construction, fabricated metal machinery and instruments industries will constitute the key buying audience for this show. The total French market for all types of U.S. design engineering parts and components is estimated at over $165 million. Call R. B. Wallace, 202-967-4508.

ISRAEL, KENYA, TURKEY. Trade Mission. June 4-15, 1973. In order to capitalize on all three countries' commitments to improve the food sector production distribution and overseas sales, this Food Processing and Packaging Mission is scheduled. Call 202-967-3904.

ITALY. Materials Test and Quality Control Equipment. Milan Trade Center, June 12-16, 1973. Featured will be electrical, electronic and sophisticated mechanical equipment for testing and analyzing physical properties of industrial materials and for environment simulation testing. Italy is a good market for American-made testing equipment. The show will be promoted to a wide audience of buyers in Italian industry, particularly companies engaged in automotive, aerospace mechanical equipment and appliance manufacturing. Contact Robert Wallace, 202-967-4508.

FRANCE. Modern Merchandising Equipment. U.S. Trade Center, Paris, June 18-22, 1973. France has developed one of the most advanced retailing systems in Europe, second only to West Germany in the proliferation of large self-service stores. Given the continuing construction, development, and success of American-style supermarkets, shopping centers, and smaller stores, the outlook for U.S. manufacturers of modern merchandising equipment is most promising. Call Samuel S. Spaulding, 202-967-3968.

HONG KONG. Industrial, Scientific, Test and Measuring Instruments, June 18-23, 1973. Hong Kong imported $3.4 million in instruments in 1971. U.S. instrument manufacturers presently enjoy about one third of the market. Imports are expected to grow to over $5 million by 1975. Call Irvin Lloyd, 202-967-3783. To be held in conjunction with **Electronic Data Processing, Reprographic and Office Equipment Exhibition.** U.S. exports of EDP equipment, business machines, accessories and parts totaled $66.3 million in 1971 with $44.2 million going to Hong Kong. Continued growth is expected for the next several years. Call Thomas Padgett, 202-967-4727.

GERMANY. Achema '73. Frankfurt, June 29-27, 1973. The triennial Chemical Engineering Exhibition and Congress is one of the world's most important events in this field. The U.S. Exhibition will feature industrial process instruments, control, regulator, and solenoid valves, related electronic computers, peripheral equipment, parts and accessories. Call Henry J. Weseloh, 202-967-4421.

ECUADOR, PERU. Air conditioning and Refrigeration Equipment Trade Mission. June 1973. Call 202-967-3904.

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

0135—SENEGAL—Partner sought for **cattle raising projects.** Principal currently operates feedlots and corrals with room for 5,000 animals (sufficient for handling 25,000 per year) on 250 acres of his 6,000 acre estate. Would like to expand operation to include a slaughterhouse, hide tanning and meat packing and canning. Has proposals from several African governments to manage feedlots and slaughterhouses. Additional information available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-72553.

2000, 2800—ITALY—Leading manufacturing and commercial group in pharmaceutical, food and agricultural sectors seeks exclusive distributorships or licensing arrangements for: **nutritional, dietary and specialty foods, prepared meals, alcoholic beverages, animal feed, additives and supplements for animal feeds; proprietary and over-the-counter drugs, sanitary products, cosmetics and high-quality or special paints and varnishes.** Has annual turnover of about $200 million. Employs 5,000 including a highly-qualified research staff and sales network of 800. Additional information from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. WTD. P-72555.

2200—ITALY—Lebanese owner of **textile manufacturing facility** near Rome seeks company to lease or assume management of its plant under contract. Other types of arrangements, such as joint venture, will also be considered. Modern plant with 28,000 spindles and 7,000 twisters. Rafic Hinedi, Rafic Hinedi & Co., Cassatli Bldg., Fakhri Bey St., Beirut, Lebanon (P.O. Box 1386, Cable: Rafidi-Beirut, Telex: 20848LE-AGIDEC). WTD. P-72554.

2800—BRAZIL—A second **petrochemical complex** is planned for the municipality of Camacari. The $650 million project will include a cracking plant and a utilities complex. First part of the utilities complex is scheduled for completion in mid-1973. For further information contact Ministerio das Minas e Energia, PETROBRAS, Avenida Dois Asa Norte, Brasilia, DF, Brasil; Ministerio das Minas e Energia 4° Distrito, Avenida Beberibe, 2980, Salvador, BA, Brasil. P-72551.

2819 — SWITZERLAND — License to manufacture **activated carbon, other chemicals for water treatment.** Also seeks to obtain processes and know-how for regeneration of used activated carbon. Firm currently produces industrial chemicals, fertilizers. Employs 300; strong financial standing. Representative of company plans to visit U.S. in December to discuss possible licensing agreements. Jacques Hepp, Director, Chemische Fabrik Uetikon, 8707 Uetikon, Switzerland. WTD. P-72288.

3079 — GERMANY — Seeks licensing, agency agreements to manufacture products for **building, hobby and recreation markets.** Firm presently makes plastic items for building industry; operates modern production facilities. Has efficient distribution network; capital available for expansion. Gunter Nitsch, manager, Market Development, German-American Chamber of Commerce, 666 Fifth Ave., New York, N.Y. 10019. P-72552.

3399—MEXICO—Largest steel producer in the country desires joint venture to produce **powdered metal** (based on steel) to be used in high pressure castings of small gears and other machine parts. This is one of several new joint ventures planned with foreign firms. Ing. Carlos Ruiz Gonzalez, Director, Altos Hornos de Mexico S.A. (AHMSA), Plaza de la Republica No. 43-2° piso, Apdo. Postal 1077, Mexico 1, D.F., Mexico. WTD. P-72545.

3449, 3272 — JAMAICA — Building firm now specializing in medium and high cost houses is interested in a license for building simple, **prefabricated houses.** Techniques requiring a minimum of machinery and, preferably, on-site assembly are desired. Shortage of wood in Jamaica would probably limit utilization of systems requiring that material. Reginald Farnell, Managing Director, Farnell Construction Co., Ltd., P.O. Box 36, Runaway Bay, Jamaica. WTD. P-72549.

3559 — GERMANY — Manufacturing rights for the production of **plastic working and processing machinery.** Also interested in manufacture of other medium-sized machinery. Firm established in 1771; operates modern plant. Employs 250. Eisen- und Hammerwerk G.m.b.H., D-7835 Teningen, West Germany. WTD. P-72556.

3569—AUSTRIA—Trading firm seeks to represent U.S. manufacturers of packaging machinery in Eastern Europe. Interested in packaging equipment for the pharmaceutical, chemical, petrochemical and food processing industry. Would include filling and labeling machinery. H. Dwortoschin, Manager, Interchemia International Trading, Seidengasse 25, A-1070 Vienna, Austria. P-72544.

3953 — GERMANY — Manufacturer of marking devices seeks licenses to produce such various marking materials as **cable markers, pipe markers, self adhesive letters and numbers, screen foils, "write-on-it" tapes, transferable printed marks, embossing systems, special foils, special labels and general marking material.** Established in 1966, firm has 500 employees and annual sales around $7.5 million. Hein-Mariker-Systeme G.m.b.H., 3 Dischinger Strasse, D-6900 Heidelberg, Germany. WTD. P-72547.

7011—LIBERIA—Joint venture for construction of motel-hotel near Roberts International Airport outside of Monrovia. Forty-five acres of beach property nearby have been acquired for this venture by a Liberian importer-exporter of restaurant and motel equipment. Mrs. Amena Cooper-Hines, Bamba-Blay, P.O. Box 2033, Monrovia, Liberia. WTD. P-72548.

Papua New Guinea Announces Harbor Development Projects

The Harbours Board of Papua New Guinea has invited experienced contractors to register as prospective bidders for the construction of port development projects at Lae, Port Moresby, Kieta, and Alotau. The projects include the construction of a wharf, a mooring dolphin, cargo storage sheds, stevedores' facilities, passenger landing facilities, coastal ships berths, an overseas shipping berth, a sheet piling retaining wall, and offices.

Copies of the registration forms are available from the Construction, Water Resources & Eng. Div., BDC-742, U.S. Dept. of Commerce, Washington, D. C., 20230 ★(202-967-3602), and the U.S. Dept. of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., P.O. Box 36013, San Francisco, Calif., 94102 ★(415-556-5864). A copy of a preliminary information booklet on these projects may be reviewed in Room 2116 of the Construction, Water Resources & Eng. Div. Further information may be obtained from the Secretary, Papua New Guinea Harbours Board, P.O. Box 671, Port Moresby, Papua New Guinea.

Jamaica Firm To Equip Cornmeal Process Plant

Jamaica Grain and Cereals, Ltd. needs the following items to **equip a cornmeal plant:** corn conveying systems; roof extract fans; passenger elevator; pouch packaging machines; cartoning machine; and bagging scale. Bids should be submitted and addressed to The Engineer, Messrs. Caribbean Engineering Management, P.O. Box 186, 1B Oxford Rd., Kingston 5. Quotations shall be itemized and include all agents commissions (if any) and for delivery c.i.f. Kingston, insured warehouse to warehouse. Offers should be accompanied by five complete sets of all descriptive literature and technical specifications.

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the Trade Opportunities Division, BIC-831, and units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.

U. S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Deparment of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-976, Washington, D.C. 20230.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Dairy products

20231—ITALY—Infant's dietary supplements. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

Canning, preserving foods

20324—ITALY—Canned food specialties. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

20330 — ITALY — Dietetic fruit, fruit juices, jams, jellies, preserves. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

Canning, preserving foods

20331—JAPAN—Canned sour cherries, canned fresh apricots for use in making pastries. Chidoriya Co., Ltd. (mfr., retailer), 6-29 Tenjin 2-chome, Fukuoka City 810. WTD in prep.

20331 — SPAIN — Canned pineapple. De la Fuente Hermanos, S.A. (importer, dist.), Avda. Menéndez Pelayo, 67, Madrid (9). WTD 3/72.

20331 — YUGOSLAVIA — Low-sugar-added canned pineapple in rings or cubes, packed in cans of 850 grams or smaller; about 100,000 cans per yr. "Kemikalija" Export-Import (importer, agent), Savska 62, P.O. Box 200, Attn: Mrs. Elvira Stefancic 41000 Zagreb, Croatia. Chief Foodstuff Dpt. WTD 4/72.

20338—JAPAN—Apricot jam for use in making pastries. Chidoriya Co., Ltd. (mfr., retailer), 6-29 Tenjin 2-chome, Fukuoka 810. WTD in prep.

20361—SPAIN—Frozen shellfish. De la Fuente Hermanos, S.A. (importer, dist.), Avda. Menéndez Pelayo, 67, Madrid (9). WTD 3/72.

20373—JAPAN—Frozen meat, beef and/or pork, for ham, sausage. Nishinippon Livestock Industry Co., Ltd. (mfr), 9-10 Shimizu 1-chome, Fukuoka City 810. WTD in prep.

Grain mill products

20420—ITALY—Prepared feeds and feed supplements for animals. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

Confectionery

20716—JAPAN—Bulk almonds at 40¢ per lb. or less for use in making pastries. Chidoriya Co., Ltd. (mfr., retailer), 6-29 Tenjin 2-chome, Fukuoka City 810. WTD in prep.

Beverage industries

20840 — ITALY — Brandy, aperitifs.

A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

20850—ITALY—Bottled, unbottled whiskey. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

Food preparations

20922—JAMAICA—Soy flour for baking. Five tons initial shipment. Direct purchase & agency. Bakery Supplies & Marketing Ltd. (importer, dist., agent), 46 Barry St., Kingston. WTD 3/72.

20922—JAPAN — Soybean residue after oil has been removed, in pellet shape. Nibishi Soysauce Co., Ltd. (dist., mfr), 8-20 Sumiyoshi 3-chome, Hakata-ku, Fukuoka City 810. WTD in prep.

20992 — SPAIN — Potato flakes. De la Fuente Hermanos, S.A. (importer, dist.), Avda. Menéndez Pelayo, 67, Madrid (9). WTD 3/72.

Broad woven fabric mills, cotton

22110—NIGERIA—Colorful California/Hawaii cotton and blended fabrics. Mr. S. O. Adedoyin (importer, dist.), Doyin Investments (Nig.) Ltd., 49 Docemo St., Lagos. WTD in prep.

22119—GERMANY—Terry cloth towels. Parfuemerie-Import, Peters & Sickert KG, Attn: Mr. Sickert (importer, dist.), 43 Essen, Annastr. 75. WTD 9/72.

Yarn, thread mills, products

22841 — EL SALVADOR — Finished threads of cotton; manmade fibers, for use in the home. Andrés Thoresen, Thoresen & Co. (importer, dist., agent), Apartado Postal 267, 6a Avenida Norte y 1a. Calle Oriente, San Salvador. WTD in prep.

Miscellaneous apparel, accessories

23850 — SWITZERLAND — Fashionable, weatherproof sailing, boating apparel. Hausammann AG (importer. dist.), Caravans und Boote, CH-8592 Uttwil. WTD 8/72.

Sawmills, planing mills

24211—GERMANY — Oregon-pine lumber. Wilhelm Fleischhut (importer, dist.), 3500 Kassel, Fiedlerstr. 8. WTD 8/72.

24212—NETHERLANDS—Sawn timber, hardwood and softwood; western red cedar No. 2, clear and better; redwood clear, all heart; Douglas fir and hemlock, No. 2 clear and better, inc. max. 15%, and No. 3 clear. Blees & Kluyver's Houtimport N.V.; Attn: Mr. B. Coster (importer), 10 Rijshoutweg, P.O. Box 267, Zaandam. WTD 8/72.

Converted paper, paperboard products

26412 — GERMANY — Filament tape. Direct purchase & agency. Friedrich Schwertfeger (importer, dist., agent), 40 Siegfriedstr., 48 Bielefeld. WTD 9/72.

26414 — GERMANY — Pressure sensitive tape, double faced, for mirrors. Direct purchase & agency. Friedrich Schwertfeger (importer, dist., agent), 40 Siegfriedstr., 48 Bielefeld. WTD 9/72.

26416 — PARAGUAY — Titanium dioxide paper strips for packing tablets, capsules, bonbons. suppositories, ovals, similar products. Dr. Tito Scavone, Scavone Hnos. S.A. (importer, dist., mfr.), Casilla Postal 105, Asuncion. WTD 9/72.

26440—ITALY—High quality wallpaper/wall coverings particularly adhesive or ready pasted, but also conventional, of following types: metallized; vinyl-coated; fabric; jute; straw; machine or handprinted. Catalogs, price list requested. L'Arte nella Casa di A. Fumagalli (dist., retailer), Via Cola di Rienzo 38, 00192 Roma. WTD 8/72.

26491 — NETHERLANDS — Stationery, related products. Direct purchase or representation; exclusive distributorship requested. Jacq. Mot N.V., Attn: Mr. D. de Ridder (importer, dist., agent), 76 Pampuslaan, Weesp. WTD 8/72.

26492 — GERMANY — Laminated creped paper, all kinds. Direct purchase & agency. Friedrich Schwertfeger (importer, dist., agent), 40 Siegfriedstr., 48 Bielefeld. WTD 9/72.

Industrial chemicals

28163—GERMANY—Inorganic pigments, carbon blacks for use by following industries: paints and lacquers; concrete and cement; plastics; rubber; asphalt; paper; ceramics and glass. Scholz, Harold & Co. (importer. dist., mfr.), 141a Frankenforst, 5060 Bensberg-Refrath. WTD in prep.

Synthetic materials

28212 — PARAGUAY — Cellophane strips for packing tablets, capsules, suppositories, similar products. Dr. Tito Scavone, Scavone Hnos. S.A. (importer, dist., mfr.), Casilla Postal 105, Asuncion. WTD 9/72.

28240 — GUATEMALA — Staple: polyester, acrylic, nylon and rayon (white) in 32 mm. length fiber. Industrias de Algodón, S.A. (mfr), 17 Calle 5-35, Zona 1 - Apartado Postal 219, Guatemala City. WTD in prep.

Drugs

28331—ITALY—Medicinal chemicals for animal feed supplements. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

28332—NIGERIA—Medicinal and botanical drugs, bulk. Mr. Okerentugba G. Thompson, Chairman/Mng. Dir. (importer, dist.), O.G.T. Group of Companies, 44 Balogun St., Lagos. WTD in prep.

28340—ITALY—Proprietary and over-the-counter drugs, including human remedies, pharmaceutical tablets, liniments, medicinal powders, ointments, dietary supplements. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

28342 — NIGERIA — Anesthetics for human use. Mr. O. G. Thompson, Chairman/Mng. Dir. (importer, dist.), O.G.T. Group of Companies, 44 Balogun St., Lagos. WTD in prep.

Paints, varnishes, lacquers, enamels

28510 — ITALY — Oil and water-type paints, enamels, varnishes. A.C.R.A.F., Aziende Chimiche Riunite Angelini Francesco, S.p.A. (importer, dist., mfr.), P.O. Box 4022, Appio, 00100 Rome. Attn.: Dr. Piero Ceroli. WTD 8/72.

Agricultural chemicals

28712—ARGENTINA—4000 MT calcium triple superphosphate (granulated). Industrias Agrofert Argentinas, S.R.L., Att/Guillermo Baya (importer, mfr.), Sarmiento 378, Buenos Aires. WTD in prep.

●28790—SRI LANKA (CEYLON)—1,000 gals. of an herbicide for use on rice based on 3.4—DPA (3',4'—dichloropropionanilide, "Propanil"). Interested suppliers should airmail a proforma invoice in triplicate quoting price c.i.f. Colombo to A. Baur Co., P.O. Box 11, Colombo.

Chemical products

28993 — BOLIVIA — Gas for cigarette lighters. Correspondence requested in Spanish. La Juventud Limitada (importer, dist.), P.O. Box 123, Cochabamba. WTD 9/72.

Petroleum refining

29110—SOUTH AFRICA — Petrolatum: USP snow white, 10,000 kilos per shipment. Boardman Bros. (Pty.) Ltd. (mfr.), P.O. Box 175, Stutterheim, Cape Province. WTD 8/72.

Fabricated rubber products

30695—SURINAM—Battery boxes, hard rubber. Mr. H. Slaöh (mfr.), Kwattaweg 37 A, Paramaribo. WTD in prep.

30697—NIGERIA—Medical, dental, surgical rubber products. Mr. O. G. Thompson, Chairman/Mng. Dir. (importer, dist.), O.G.T. Group of Companies, 44 Balogun St., Lagos. WTD in prep.

Plastic products

30794—PARAGUAY—Plastic cases for lipsticks, compacts, eye shadows, deodorant sticks, talcum powder, beauty creams, similar products. Dr. Tito Scavone, Scavone Hnos. S.A. (importer, dist., mfr.), Casilla Postal 105, Asuncion. WTD 9/72.

30795—GERMANY—Rollers, plastic, for conveyor systems. Wiens GmbH., Attn: Mr. Carsten (mfr.), 671 Frankenthal, Postf. 344. WTD in prep.

30795—SURINAM—Battery separators, plastic. Mr. H. Slaöh (mfr.), Kwattaweg 37 A, Paramaribo. WTD in prep.

30797—NETHERLANDS—Plastics dinnerware, tableware, kitchenware, related articles; for institutional use. Exclusive representations requested or direct purchase. Jos ten Berg's Handelmij. B.V., Attn: Mr. F. J. M. ten Berg (importer, dist., agent), 17-19 Donkerstraat, P.O. Box 2054, Utrecht. WTD in prep.

Leather tanning, finishing

31111—NIGERIA—Leather and plastic belts. Mr. S. O. Adedoyin, Mng. Dir. (importer, dist), Doyin Investments (Nig.) Ltd., 49 Docemo St., Lagos. WTD in prep.

Luggage

31610—NIGERIA—Suitcase and handbag fittings. Mr. S. O. Adedoyin, Mng. Dir. (importer, dist.), Doyin Investments (Nig.) Ltd., 49 Docemo St., Lagos. WTD in prep.

Steel mill products

33152 — GERMANY — Sheeting nails. Eberhard Jaeger GmbH (importer, dist., mfr.), 5922 Berghausen. WTD 9/72.

Rolling, drawing, extruding of nonferrous metals

● 33500—THAILAND — Purchases and Stores Department, Metropolitan Electricity Authority, 121 Chakpetch St., Bangkok, Thailand invites bids for 138

KV underground oil filled copper cable, 800 sq. mm. Tender No. ADB-MEA-006. Bid deadline Oct. 27. Copies of specifications available from Metals and Minerals Division/Copper Program, BDC-784, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-2438).

Metal cans

34110—PARAGUAY—Tin cans or other metal cans for aerosols, 2½, 3, 6, 9, and 16 ozs., suitable for deodorants, shaving creams, tanning lotions, hair sprays, insecticides, medications, similar uses; aerosol can valves. Dr. Tito Scavone, Scavone Hnos. S.A. (importer, dist., mfr.), Casilla Postal 105, Asuncion. WTD 9/72.

Cutlery, hand tools, general hardware

34231—JAPAN—Jacks, mechanical, for all weight capacities. Usuki Iron Works, Inc. (mfr.), 777 Ikushi-machi, Oita City 870. WTD in prep.

34291—SWITZERLAND—Marine hardware, shackles, winches, wire rope clips, clamps, tackle blocks for lake pleasure boats, yachts, house boats. Hausamann AG (importer, dist.), Caravans und Booté, CH-8592 Uttwil. WTD 8/72.

34293—SWITZERLAND—Insulated picnic chests, coolers, novelties. Hausammann AG (importer, dist.), Caravans und Booté, CH-8592 Uttwil. WTD 8/72.

34293—SWITZERLAND—Insulated picnic chests, food, beverage coolers, novelties, suitable for mail order business. Tono AG (importer, dist.), Dufourstr. 145, P.O.B. 334, CH-8034 Zurich. WTD 8/72.

34295 — SWITZERLAND — Camping hardware, camping trailer accessories, equipment. Hausammann AG (importer, dist.), Caravans und Booté, CH-8592 Uttwil. WTD 8/72.

Fabricated structural metal products

34437—AUSTRIA—Steel containers for swimming pool filters, 400 mm O, 1500 mm/h; 500 mm O, 1500 mm/h; 650 mm O, 1800 mm/h. TARI Gesellschaft m.b.H. (importer, dist., agent), Peter Rosegger-Weg 12, P.O. Box 116, A-5280 Braunau/Inn. WTD 3/71.

Screw machine products

34521—GERMANY—Sheet metal screws, sheeting screws and sealing washers. Eberhard Jaeger GmbH (importer, dist., mfr.), 5922 Berghausen. WTD 9/72.

34521—JAPAN—Screws, bolts, nuts and grease caps for lubrication fittings made of monel, or equal, made to metric standards. Usuki Iron Works, Inc. (mfr.), 777 Ikuishi-machi, Oita City 870. WTD in prep.

Metal stampings

34615 — NETHERLANDS — Household cooking and kitchen utensils, suitable for sales on racks, in blister or skinpack. Exclusive representations requested; also direct purchase. Jacq. Mot N.V., Attn: Mr. D. de Ridder (importer, dist., agent), 76 Pampuslaan, Weesp. WTD 8/72.

34618 — PARAGUAY — Aluminum, other metal cases for lipsticks, compacts, eye shadows, deodorant sticks, talcum powder, beauty creams, similar products; aluminum and other metal cans, and valves, for aerosols, 2½, 3, 6, 9, and 16 ozs., suitable for deodorants, shaving creams, tanning lotions, hair sprays, insecticides, medications, similar uses; aluminum and other metal tubes and/or boxes, varnished, 5, 10, 15, 20, 30, 70, 100, and 160 milligrams, for toothpaste, shaving creams, beauty creams, medicinal pomades, ointments, similar products. Dr. Tito Scavone, Scavone Hnos. S.A. (importer, dist., mfr.), Casilla Postal 105, Asuncion. WTD 9/72.

Special Action

Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.

20310 — GERMANY — Deep-frozen Pacific salmon from new catch; approx. 130/150,000 kilograms; later to increase to approx. 300,000 kilograms. E.M.C. Sjoedoff, Lachsimport (importer), 2 Hamburg 50, Museumstrasse 18/II. WTD in prep.

20370 — GERMANY — Cherries, dark sour, pitted, IQF and block frozen, red sour pitted, IQF and block frozen, black sweet, block frozen; Maine blueberries (wild variety) IQF; wild lingon berries, IQF; citrus fruit, orange, grapefruit, tangerine segments, seedless, IQF; vegetables, cut corn IQF; cut green beans, IQF; green peas IQF, grades A, B, C, D; wax beans, IQF; diced red peppers, 1/5 and ¼" cuts, IQF; broccoli spears, IQF; USA grade A quality, all in bulk packages, 30 to 60 lbs. or similar. V. Lind & Co. (importer, agent), 2 Hamburg 36, Hohe Bleichen 22. Telegram address: Lindvon Hamburg; Telex: 02-12338 Lind-Brogan.

28120 — GUATEMALA — Chlorine, sodium carbonate (soda ash), and sodium hydroxide used in textile industry. Industrias De Algodón, S.A. (mfr.), 17 Calle 5-35, Zona 1 —Apartado Postal 219, Guatemala City. WTD in prep.

28152—GUATEMALA — Synthetic organic dyes (fast) for yarns and textile fabrics. Industrias de Algodón, S.A. (mfr), 17 Calle 5-35, Zona 1—Apartado Postal 219, Guatemala City. WTD in prep.

38710 — GERMANY — Quartz wrist watches. Correspondence requested in English/German. Max A. Obermann K.G. (dist., agent), 2 Hamburg 63, Wellingsbuetteler Landstrasse 115. WTD in prep.

Fabricated metal products

34941 — FRANCE — Safety and relief valves, leak proof pipe couplings and fittings for cast iron and steel piping systems for gas, water, petroleum. Direct purchase & agency. Electroma (importer, agent, retailer), 65, Rue d'Adelshoffen, 67 Schiltigheim. WTD in prep.

34944 — SPAIN — Pneumatic valves for power transformers. Correspondence requested in Spanish. Centralair, S.L. (importer, agent), Maestro Guridi, s/n, San Sebastián, Guipúzcoa. WTD 8/72.

34970 — PARAGUAY — Foil laminated and/or coated with polyethylene strips for packing tablets, capsules, bonbons, suppositories, ovals, similar products. Dr. Tito Scavone, Scavone Hnos. S.A. (importer, dist., mfr.), Casilla Postal 105, Asuncion, Paraguay. WTD 9/72.

34990—GERMANY—Inserts for airless spray nozzles made of tungsten carbide and/or sintered metals; complete spray nozzles. Wilhelm Fleissner K.G. (mfr.), D-7110 Oehringen, Daimlerstr. 2. WTD 12/71.

Engines, turbines

35190—BRAZIL—Main marine motors. Inconav Industria e Comércio Naval (importer, mfr.), Av. Presidente Vargas 542, sala 1503, Rio de Janeiro, GB. WTD 7/72.

Farm machinery

35223 — ARGENTINA — Garlic seeders. Requests descriptive literature, price quotations. Daniele & Liniado, S.R.L. (importer, exporter), Florida 253, 5° Piso, Buenos Aires. WTD in prep.

Construction, mining, materials handling machinery, equipment

35318 — FRANCE — Used truck cranes, spare parts. Kirwan S.A. (importer), 4, rue de Préaux, 95 Saint-Ouen. WTD in prep.

35320—ISRAEL—Rescue equipment for clearing rock falls or cave-ins in underground mines; mobile, hydraulic, pneumatic, or electrically operated; for use in tunnels 4 to 5 yds. in height. The Institute for Safety & Hygiene. 22 Maze St., P.O. Box 1122, Tel Aviv. Attn: Mr. M. Shamai, Head, Safety Eng'g Dept.

Metalworking machinery

35480 — JAPAN — Labor saving equipment, machinery for automotive and parts production. Nagoya I.E.C. Co., Ltd. (importer, dist.), 10, 2-chome, Higashikataha-cho, Higashi-ku Nagoya 461. WTD 8/72.

35483 — JAPAN — Beryllium torch nozzles for cutting torches to be used for cutting steel, made to metric standards. Usuki Iron Works, Inc. (mfr.), 777 Ikuishi-machi, Oita City 870. WTD in prep.

35485 — MEXICO — Tack (fancy and plain) making machinery of type used by upholsterers. Requests replies from manufacturers only. Maldonado, S.A., c/o Lic. Félix E. Maldonado Díaz (importer, mfr.), Pino Suárez Nte. 525, Monterrey, N.L. WTD 1/72.

Special industry machinery

● **35500—EGYPT**—Design, supply and supervision of erection, start up and taking over tests of a plant for the extension of El Nasr Company for rubber products at Shoubra El Khima, Cairo. Extension is to increase the annual capacity by 6,000 tons. Tender No. 5/72; bid deadline Dec. 4. Tender documents are available from The General Organization for Industrialization 6, Khalil Agha St., Garden City, Cairo for L.E. 25.00 ($57.50) plus airmail postage. A review copy of the tender documents is available on a short term loan basis to firms domiciled in the U.S. from General Industries Div., BDC-772, U.S. Dept. of Commerce. Washington, D.C. 20230, ★(202-967-5593).

35511 — LIBERIA — Machinery to equip dairy plant capable of processing about 1,000 lbs. per day. Dr. A. Rathore, Dir. of Research, Central Agricultural Experiment Station, Ministry of Agricul-

ture (govt. agency), Suakoko, Bong County or c/o Economic/Commercial Section, American Embassy, Monrovia, Liberia, APO New York, N.Y. 09155.

35512—GERMANY—Bakery machinery. Direct purchase & agency. Erdmann GmbH & Co. KG., Attn: Mrs. Rentsch (importer, dist.), 56 Wuppertal-Barmen, Saarbruecker Str. 30. WTD 11/71.

35512—NEW ZEALAND—Machines to extrude potato sticks from mashed potato base, to make French fried potatoes. M. S. D. Speirs Ltd., Attn: D. P. Speirs, Dir. (restaurant), P.O. Box 186, Marton. WTD 8/72.

35513—GERMANY—Meat grinders, special butcher's machinery. Direct purchase & agency. Erdmann GmbH & Co. KG., Attn: Mrs. Rentsch (importer, dist.), 56 Wuppertal-Barmen, Saarbruecker Str. 30. WTD 11/71.

● 35595—KOREA—Equipment to manufacture asbestos cement sheets both flat and corrugated. Such equipment should include corrugators, presses, conveyors. Mr. S. Y. Chang, Chief, Machinery Dept. Miyoung Co., Ltd., #16 1-Ka, Ulchi-ro, Chung-Ku, Seoul, 100 or I.P.O. Box 1352, Seoul 100. WTD 11/71.

General industrial machinery

35612 — JAPAN — Miniature hydraulic/pneumatic power units and components including related valves, pumps. Yuki Hydraulic Corp. (dist.), 5-20 Kumamoto 3-chome, Kokura-ku, Kitakyushu 802. WTD in prep.

35629—GERMANY—Rollers, galvanized steel, for conveyor systems. Wiens GmbH., Attn: Mr. Carstens (mfr.), 671 Frankenthal, Postf. 344. WTD in prep.

35690—AUSTRIA—Four, five, and six-way valves for swimming pool filters; time controlled automatic equipment for swimming pool filters in bronze, stainless steel, or plastics materials; 6/4", 2", 2½". TARI Gesellschaft m.b.H. (importer, dist., agent), Peter Rosegger-Weg 12, P.O. Box 116, A-5280 Braunau/Inn. WTD 3/71.

35690—JAPAN—Jacks, hydraulic, for all weight capacities. Usuki Iron Works, Inc. (mfr.), 777 Ikushi-machi, Oita City 870. WTD in prep.

35690—JAPAN—Squeezer or centrifugal machine to strain soysauce from soybean ingredients. Direct purchase & agency. Nibishi Soysauce Co., Ltd. (dist., mfr.), 8-20 Sumiyoshi 3-chome, Hakata-ku, Fukuoka City 810. WTD in prep.

35690—JAPAN—Machine for stripping plastic sheathes from used wire. Nishinippon Electric Wire and Cable Co., Ltd. (mfr.), 2899 Oaza Danoharu, Oita City 870. WTD in prep.

35690—TRINIDAD & TOBAGO—Simple type sachet making machine capable of packaging liquids, powders and wettable powders either in airtight foil or paper containers or in airtight plastic film. Caribbean Chemicals & Agencies Ltd. (importer, dist., retailer), 2A Charlotte St., P.O. Box 667, Port of Spain. WTD 7/72.

Service industry machines

35853—GERMANY—Soft ice machines. Direct purchase & agency. Erdmann GmbH & Co. KG., Attn: Mrs. Rentsch (importer, dist.), 56 Wuppertal-Barmen, Saarbruecker Str. 30. WTD 11/71.

35857—GERMANY—Soft drink dispensing machines. Direct purchase & agency. Erdmann GmbH & Co. KG., Attn: Mrs. Rentsch (importer, dist.), 56 Wuppertal-Barmen, Saarbruecker Str. 30. WTD 11/71.

Machinery

35990 — ARGENTINA — Steam cleaning equipment for boiler pipes. Requests descriptive literature, price quotations. LIMCO, S.A.I.C. (industrial cleaning contractor), Paraguay 877, 6° Piso, Buenos Aires. WTD in prep.

Electric transmission, distribution equipment

●36100—INDIA—Supply of 67 sets of loose protection relays for lines, transformers and busbars associated with 220 kv/132 kv, 3 phase solidly grounded system; 34 sets of tariff meters, commercial grade, 3-element type, to be used in 3-phase 4-wire unbalanced system. Tender No. IDA/WBSEB/A/7, bid deadline Dec. 4. Tender documents available from the Superintending Engineer (Stores & Purchase), West Bengal State Electricity Board, 6, Little Russell St. (5th floor), Calcutta 16, India, for $16.50 per set, including postage. A copy is available for review only, but not for loan, at the Business, Photographic and Scientific Equipment Division, Room 1128. U.S. Dept. of Commerce, Washington, D.C.

36112 — GERMANY — Oscilloscopes, especially sampling, vector, color oscilloscopes. Direct purchase & agency. Dressler Elektronik Ing. Dieter Morich (importer, dist.), 6 Gutenbergstrasse, 2804 Bremen-Lilienthal. WTD 8/72.

Electrical industrial apparatus

36232 — BRAZIL — Arc welding electrodes, stainless steel, bronze, nickel. Diselma Distribuidora de Eletrodos e Maquinas Ltda. (importer), Rua Washington Luiz 51-A loja, Rio de Janeiro, GB. WTD 8/72.

36292 — SURINAM — Battery chargers, eliminators. Mr. H. Slaöh (mfr.), Kwattaweg 37 A, Paramaribo. WTD in prep.

Household appliances

36321—BOLIVIA—Refrigerators, household. Direct purchase & agency. Correspondence requested in Spanish. La Juventud Limitada (importer, dist.), P.O. Box 123, Cochabamba. WTD 9/72.

Radio, television receiving sets

36512—BOLIVIA — Television receivers, household. Direct purchase & agency. Correspondence requested in Spanish. La Juventud Limitada (importer, dist.), P.O. Box 123, Cochabamba. WTD 9/72.

Communication equipment

●36620 — LIBYA — The Central Tender Board, Ministry of Information has issued tender No. 1449 for the supply and installation of a shortwave transmitter. Bid deadline is 10 a.m., December 18. Copies of tender announcement and specifications are available from the Broadcasting Admn., Ministry of Information, Tripoli, Libyan Arab Republic for $465 per copy.

36625 — BRAZIL — Radar and sonar equipment. Inconav Industria e Comercio Naval S.A. (importer, mfr.), Av. Presidente Vargas 542 sala 1503, Rio de Janeiro—GB. WTD 7/72.

Electronic components, accessories

36790—GERMANY — Electronic components, all kinds. Hans Joachim Kimmerle (dist., agent), 741 Reutlingen, Aispachstr. 24a. WTD 9/72.

Transportation equipment

37910 — SWITZERLAND — Camping trailer parts, accessories, inside furnishings, novelties. Hausammann AG (importer, dist.), Caravans und Booté, CH-8592 Uttwil. WTD 8/72.

Laboratory, scientific instruments

38112 — JAMAICA — Auto analyzer for measuring blood chloesterol level. Quotations c.i.f. Kingston. Larry Wirth & Assoc., Attn: Larry Wirth (importer, hotel service), P.O. Box 111, Kingston 8. WTD in prep.

Optical instruments, lenses

38311—SWITZERLAND — Astronomical refractor telescopes, professional-model scopes, power scopes. Tono AG (importer, dist.), Dufourstr. 145, P.O.B. 334, CH-8034 Zürich. WTD 8/72.

Surgical, medical, dental instruments

●38400—SRI LANKA (CEYLON)—Supply of gypona plaster of paris bandages: 42,000 rolls, 3" x 3 yards; 84,000 rolls, 4" x 3 yards; 84,000 rolls, 6" x 3 yards; in air-tight tins and any convenient packing. Bid deadline Nov. 3. Invited by the Department of Health, P.O. Box No. 584, Colombo, Republic of Sri Lanka (Ceylon). Tender documents are available at Embassy of Sri Lanka (Ceylon), 2148 Wyoming Ave., NW., Washington, D.C. Reference No. COM/TEN/72/37.

38410—BRAZIL—Surgical and medical instruments, apparatus. Direct purchase & agency. Sociedade Importadora Grassi Ltda. (dist., agent, retailer), Rua Senador Dantas 76 sobreloja, Rio de Janeiro, GB. WTD 7/72.

38410—NIGERIA—Surgical and medical instruments, apparatus. Mr. O. G. Thompson, Chairman/Mng. Dir. (importer, dist.), O.G.T. Group of Companies, 44 Balogun St., Lagos. WTD in prep.

38421 — NIGERIA — Surgical, orthopaedic, prosthetic appliances, supplies. Mr. O. G. Thompson, Chairman/Mng. Dir. (importer, dist.), O.G.T. Group of Companies, 44 Balogun St., Lagos. WTD in prep.

38423—BRAZIL — Welding helmets and masks. Diselma Distribuidora de Eletrodos e Maquinas Ltda. (importer), Rua Washington Luiz 51-A, Rio de Janeiro, GB. WTD 8/72.

Ophthalmic goods

38513—BRAZIL—Lens for welding goggles. Diselma Distribuidora de Eletrodos e Maquinas Ltda. (importer), Rua Washington Luiz 51-A loja, Rio de Janeiro, GB. WTD 8/72.

Photographic equipment

38613—GERMANY—Motion pictures for home use (home movies) in N 8 and S 8, all subjects; accessories for motion picture showing, such as viewers, projectors, cameras. Gutacker + Schuster Handels GmbH (dist., agent, retailer), 19 Sophienstrasse, D-7000 Stuttgart 1, Baden-Wuerttemberg. WTD 9/72.

Jewelry, silverware, plated ware

39142—SWITZERLAND—Stainless steel camping cutlery, storage chests. Tono AG (importer, dist.), Dufourstr. 145, P.O.B. 334, CH-8034 Zürich. WTD 8/72.

Toys, amusement, sporting goods

39493 — SWITZERLAND — Sporting goods, scuba equipment, home training,

physical fitness equipment, trampolines, exercising equipment, winter sports equipment, novelties, gadgets, suitable for mail order business. Tono AG (importer, dist.), Dufourstrasse 145, P.O. Box 334, CH-8034 Zürich. WTD 8/72.

Pens, pencils, office, artists' materials

39510—NIGERIA—Ballpoint and fountain pens. Mr. S.O. Adedoyin, Mng. Dir. (importer, dist.), Doyin Investments (Nigeria) Ltd., 49 Docemo St., Lagos. WTD in prep.

Costume jewelry, novelties, buttons, notions

39610—SWITZERLAND—Costume jewelry, novelties, watch bracelets, imitation pearls, necklaces, plastic, leather costume jewelry, suitable for mail order business. Tono AG (importer, dist.), Dufourstr, 145, P.O.B. 334, CH-8034 Zürich. WTD 8/72.

39642—NETHERLANDS—Needles, pins, fasteners, similar sewing notions; in blister or skinpack. Direct purchase or representation; exclusive distributorship requested. Jacq. Mot N.V., Attn: Mr. D. de Ridder (importer, dist., agent), 76 Pampuslaan, Weesp. WTD 8/72.

Manufacturing industries

39911 — ITALY — Powered automatic scrubbers. Direct purchase & agency. M.A.E.P. (Macchine Apparecchi E Pulizia (dist. agent), Via Steffenone 4, Turin 10134. WTD 5/72.

39913 — SAUDI ARABIA — 12 to 24 thousand toothbrushes per yr. under own brand name which firm intends to register with Saudi Arabian trademark registration office. Prices c.i.f. Jidda and Dammam. Deal depends upon price, quality. Al-Najah Medical Stores (importer, dist., retailer), P.O. Box 400, King Abdulaziz St., Jidda. WTD in prep.

39999 — SWITZERLAND — Wigs, switches, toupees, hair curlers, tobacco pipes, cigarette holders, cigarette lighters, gadgets, gifts, decorative items, suitable for mail order business. Tono AG (importer, dist.), Dufourstr. 145, P.O.B. 334, CH-8034 Zürich. WTD 8/72.

Thai Firm To Purchase Hospital Equipment, Instruments

United Material Company Ltd. is seeking suppliers of a complete line of hospital equipment and instruments for use in the following functions: medical, surgical, pediatrics, obstetrics, E.E.N.T., dental, X-ray, pathology, central sterile supply, physiotherapy, kitchen, laundry, etc., for a new 750-bed hospital. Interested U.S. suppliers should communicate directly with and send literature and price list to: Yongyos Rojvachiranonda, United Material Co., Ltd., 86 Chula Soi 16, Rama 4 Road, P.O. Box 1769, Bangkok, Thailand.

Japanese Firm Seeks Lace

A Japanese firm specializing in imports of handcrafts, novelty items, and gift ware is seeking a variety of elaborate lace specialty products. Interested U.S. suppliers should contact: N. Yamagishi Co., No. 605 Nisso Iwai Ichikawa Mansion, 1-13-28, Ichikawa, Ichikawa City, Chiba Prefecture. WTD in prep.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Commercial farms

01190—VENEZUELA—Oat grains: triple cleaned, rolled and polished. Quotations urgently requested. River Rey Co., Attn: Mr. Rivero (importer, agent), Apartado 61901 Este, Caracas. WTD 7/72.

Meat products

20136—BAHAMAS — Factory produced bacon in consumer quantities, i.e. sliced and sold in packages already weighed and ready to be sold retail. Good quality, various cuts and prices to be quoted for interested firm. Factory produced whole hams of approximately 12 lb. to be shipped in 50-60 lb. containers which will be sold wholesale. Good quality required. State prices, delivery time. Milo B. Butler & Sons Ltd., Attn: Mr. Franklyn Butler (dist., agent, retailer), O, I, P.O. Box N-712, Nassau. WTD 11/71.

20137—BAHAMAS — Factory produced bologna meat of good quality, name brands. Requests prices of whole rolls (8 lb.-10 lb.) to be shipped in 50-60 lb. cases which will be sold wholesale. State prices for various quantities; delivery time. Milo B. Butler & Sons Ltd. (dist., agent, retailer), P.O. Box N-712, Attn: Mr. Franklyn Butler, Nassau. WTD 11/71.

Canning, preserving foods

20321—ETHIOPIA—Canned baby foods. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

20331—ETHIOPIA—Canned fruits. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

20332—ETHIOPIA—Canned vegetables. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

20338—ETHIOPIA — Jams, jellies, preserves. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

20341 — ETHIOPIA — Dried and dehydrated fruits, vegetables. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

Grain mill products

20430—ETHIOPIA — Cereals, breakfast food. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

Confectionery

20716—ETHIOPIA — Salted nuts, other confectionery type products. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

20722—ETHIOPIA — Confectionery-type chocolate, made from cocoa beans. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

Beverage industries

20830 — VENEZUELA — Malted barley for beer breweries. Quotations urgently requested. River Rey Co., Attn: Mr. Rivero (importer, agent), Apartado 61901 Este, Caracas. WTD 7/72.

Yarn, thread mills, products

22842 — EL SALVADOR — Finished threads of cotton; manmade fibers, for industrial use. Mr. Andrés Thoresen, Thoresen & Co. (importer, dist., agent), Apartado Postal 267, 6a. Avenida Norte y la. Calle Oriente. WTD in prep.

Narrow fabrics, smallwares mills

22411—GERMANY—Electric insulating tape. Dipl. Ing. Ulrich P. Bader (importer, agent), 6227 Oestrich-Winkel, Rieslingstr. 21. WTD 9/72.

Sawmills, planing mills

24261 — CANADA — Hardwood flooring. Mr. I. Rudy, Canflo Hardwood Flooring (mfr.), 1304 Beaumont Ave., Montreal 304, Quebec. WTD in prep.

Office furniture

25223 — NETHERLANDS — Mechanical, other filing equipment, related products such as mobile storage systems, etc. Exclusive representations requested for Netherlands or European Common Market countries. Bumas N.V. (dist., agent, retailer), 112-114 Weteringschans, Amsterdam. WTD 8/72.

Pulp mills, products

26111 — GERMANY — Pulp. Cell GmbH (importer, agent), 18 Steinstrasse, 4 Duesseldorf. WTD in prep.

26112—SWITZERLAND—Chemicals for paper industry. Born + Stucki AG, Attn: Mr. Bodmer (importer, dist.), Grellingerstr. 74, 4000 Basel 20. WTD in prep.

Paperboard mills, products

26311 — GERMANY — Kraftliner. Cell GmbH (importer, agent), 18 Steinstrasse, 4 Duesseldorf. WTD in prep.

Converted paper, paperboard items

26432—GERMANY—Plastics (polyethylene) liners for storage tanks. Kunststofftechnik Dinslaken GmbH & Co. KG (dist., mfr.), Box 68, 422 Dinslaken. WTD in prep.

26490—CANADA—Items used in retail or commercial stationery in stationery or department store trade. Terry Tobin Agencies (dist., agent), 1120 Lake Wapta Rd., Calgary, Alberta T2J 2P2. WTD in prep.

General commercial printing

27530—CANADA—Items used in retail or commercial stationery in stationery or department store trade. Terry Tobin Agencies (dist., agent), 1120 Lake Wapta Rd., Calgary, Alberta T2J 2P2. WTD in prep.

Industrial chemicals

28160—GERMANY — Chemical products for paper industry. Cell GmbH (importer,

agent), 18 Steinstrasse, 4 Duesseldorf. WTD in prep.

28163—DENMARK—Iron oxide, transparent. Kay Koppel (importer, agent), 10 Egebjerg Alle, DK-2900 Hellerup. WTD 9/72.

28190—SWITZERLAND — Pharmaceutical specialties for diagnostic purposes for use in medical laboratories; preparations for internal use to facilitate diagnosis. Dolder AG, Attn: Mr. Biber (dist., mfr., agent), Immengasse 9, 4000 Basel 4. WTD 4/72.

28199 — SWITZERLAND — Industrial chemicals such as sulfer compounds salts. Born + Stucki AG., Attn: Mr. Bodmer (importer, dist.), Grellingerstrasse 74, 4000 Basel 20. WTD in prep.

28199—THAILAND — Activated carbon for water, oil filters. Requires specifications, prices. International Chemicals & Engineering Co. (importer, dist., agent), G.P.O. Box 946, Bangkok. WTD 11/71.

Synthetic materials

28213 — AUSTRIA — Polystyrene, other styrene resins. Manufacturers only. Pointner & Rothschaedl Chemikalien-Handelsges.m.b.H. (importer, dist., agent), Muenchner Bundesstrasse 121, P.O. Box 82, A-5021, Salzburg. WTD 2/71.

Drugs

28330—GREECE — Medicinal chemicals, botanical products. C.i.f.-Piraeus price quotations. Etablissements A. Dedoussi (importer, dist., agent), 77 Menandrou St., Athens 107. WTD 8/72.

28330 — SWITZERLAND — Fine chemicals for manufacture of pharmaceutical preparations for human, veterinary use. Born + Stucki AG, Attn: Mr. Bodmer (importer, dist.), Grellingerstr. 74, 4000 Basel 20. WTD. in prep.

28341—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist., mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28342—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist., mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28343—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist., mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28344—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist., mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28345—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist., mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28346—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist.. mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28346—GREECE — Pharmaceutical specialties acting on the skin, for human use. C.i.f.-Piraeus price quotations. Etablissements A. Dedoussi (importer, dist., agent), 77 Menandrou St., Athens 107. WTD 8/72.

28348—AUSTRIA—Proprietary pharmaceutical products for human use. Manufacturers only. Castrol Austria Ges. m.b.H. (importer, dist., mfr.), Schwarzenbergplatz 6, A-1030 Vienna. WTD 3/72.

28349—GREECE—Pharmaceutical preparations for veterinary use (poultry, pigs, cows). C.i.f.-Piraeus price quotations. Etablissements A. Dedoussi (importer, dist., agent), 77 Menandrou St., Athens 107. WTD 8/72.

Soap, detergents, cleaning preparations, perfumes, cosmetics

28441 — ETHIOPIA — Shaving preparations. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

28442—ETHIOPIA—Perfumes, toilet water, colognes. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

28443 — ETHIOPIA — Hair preparations (including shampoos). Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

28444—ETHIOPIA—Dentifrices, mouthwashes, related products. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

28445 — ETHIOPIA — Cosmetic, toilet preparations. Achkar Private Ltd. Co. (importer, dist., agent), Dejazmatch Nassibou Zone, P.O. Box 100, Addis Ababa. WTD 8/72.

28445—GREECE—Cosmetics, toilet preparations. C.i.f.-Piraeus price quotations. Etablissements A. Dedoussi (importer, dist., agent), 77 Menandrou St., Athens 107. WTD 8/72.

28445 — SWITZERLAND — Cosmetics, semi finished and basic compounds; oils, similar products. Born + Stucki AG, Attn: Mr. Bodmer (importer, dist.), Grellingerstr. 74, 4000 Basel 20. WTD in prep.

Agricultural chemicals

28790—SOUTH AFRICA — Agricultural pesticides, agricultural chemicals. Agroquip (Pty.) Ltd. (importer, dist., agent), 1st Floor, United Bldg., Main Rd., P.O. Box 308, Strand, Cape Province. WTD 8/72.

Chemical products

28990—SWITZERLAND—Chemical supplies for foundries such as flux, parting compounds. Born + Stucki AG, Attn: Mr. Bodmer (importer, dist.), Grellingerstr. 74, 4000 Basel 20. WTD in prep.

28993—GERMANY—Insulation products used in electrical, electronic industries. Dipl. Ing. Ulrich P. Bader (importer, agent), 6227 Oestrich-Winkel, Rieslingstr. 21. WTD 9/72.

28993—NETHERLANDS—Water pollution control & treatment chemicals and compounds, especially for harbors. ships. Exclusive agency. Monda & Lambrechts Handelsonderneming, Attn: Mrs. G. Monda. Pres. (importer, dist., agent), 55 Beukelsdijk, or P.O. Box 2134, Rotterdam. WTD 8/72.

Fabricated rubber products

30697 — CANADA — High quality surgeon's gloves of rubber latex. Exclusive representation for all of Canada. Charles Salama, Spectrex, Ltd. (importer, dist., agent), 2245 St. Francois Rd., Dorval 740, Quebec. WTD 3/72.

Plastic products

30795—GERMANY—Industrial plastics products, such as tanks, containers, tubs and hoods for use in chemical industry. Kunststofftechnik Dinslaken GmbH & Co. KG (dist., mfr.), Box 68, 422 Dinslaken. WTD in prep.

30796—CANADA—Plastic shingles. Mr. I. Rudy, Canflo Hardwood Flooring (mfr.), 1304 Beaumont Ave., Montreal 304, Quebec. WTD in prep.

30796—GERMANY—Plastics pipe, construction (including drain tile, sewer pipe, pressure pipe). Kunststofftechnik Dinslaken GmbH & Co. KG (dist., mfr.), Box 68, 422 Dinslaken. WTD in prep.

30796—GERMANY — Construction plastics products. Ferd. Wilh. Wagner KG. (mfr.), 5470 Andernach, Koblenzer Str. 42. WTD 4/72.

Glass, glassware

32291 — ISRAEL — Glassware, pressed, heat-resistant; for household use. Arico-Trading (Israel) (importer, dist., agent), 44 Jaffa-Tel Aviv Rd., Tel Aviv. WTD 10/71.

Glass products, made of purchased glass

32316 — NETHERLANDS — Glassware, related articles for use in hospitals, hotels, catering industry and similar institutions, industries. Exclusive representations requested, also direct purchase. Jos ten Berg's Handelmij. B.V., Attn: Mr. F. J. M. ten Berg (importer, dist., agent), 17-19 Donkerstraat, P.O. Box 2054, Utrecht. WTD in prep.

Pottery, related products

32620 — NETHERLANDS — Tableware and kitchenware for use in hospitals, hotels, similar institutions and catering industry. Exclusive representations requested, also direct purchase. Jos ten Berg's Handelmij. B.V., Attn: Mr. F. J. M. ten Berg (importer, dist., agent), 17-19 Donkerstraat, P.O. Box 2054, Utrecht. WTD in prep.

32640 — BRAZIL — Porcelain insulators. Correspondence requested in Portuguese. J. G. Oliveira (agent), Rua José Carlos Camargos 118, Contagem, MG. WTD 6/72.

32690 — NETHERLANDS — Pottery products, including chemical stoneware and porcelain & stoneware table and kitchen articles, for use in hospitals, hotels, similar institutions and in catering industry. Exclusive representations requested, also direct purchase. Jos ten Berg's Handelmij. B.V., Attn: Mr. F. J. M. ten Berg (importer, dist., agent), 17-19 Donkerstraat, P.O. Box 2054, Utrecht. WTD in prep.

Abrasive, asbestos, nonmetallic mineral products

32990—GERMANY — Electric insulation material, mica basis. Dipl. Ing. Ulrich P. Bader (importer, agent), 6227 Oestrich-Winkel, Rieslingstr. 21. WTD 9/72.

Cutlery, hand tools, general hardware

34211—SOUTH AFRICA—Hedge, grass shears, pruners. Agroquip (Pty.) Ltd. (importer, dist., agent), 1st Floor, United Bldg., Main Rd., P.O. Box 308, Strand, Cape Province. WTD 8/72.

34231—CANADA—Hand tools and general hardware, machine tools, vices. The Industrial Distributing Co., Attn: Nicholas Ryback (agent), 3289 Lenworth Dr., Cooksville, Ontario. WTD in prep.

34232—SOUTH AFRICA—Agricultural, garden edged hand tools. Agroquip (Pty.) Ltd. (importer, dist., agent), 1st Floor, United Bldg., Main Rd., P.O. Box 308, Strand, Cape Province. WTD 8/72.

34291—DENMARK — Marine hardware. V. Burcharth & Son A/S (importer, dist., agent), 9 Vestre Stationsvej, DK-5000 Odense. WTD 9/72.

Heating apparatus, plumbing fixtures

34330 — CANADA — Stoker grates & ovens for municipal incineration. Taylor Engineering & Construction Co. Ltd., Attn: Mr. B. Tyson, Marketing (dist., agent, mechanical construction contractors), 111 Stephenson Ave., Toronto 13, Ontario. WTD 2/71.

Fabricated structural metal products

34410—CANADA—Expansion joints. Mr. I. Rudy, Canflo Hardwood Flooring (mfr.), 1304 Beaumont Ave., Montreal 304, Quebec. WTD in prep.

34443 — CANADA — Skylights. Mr. I. Rudy, Canflo Hardwood Flooring (mfr.), 1304 Beaumont Ave., Montreal 304, Quebec. WTD in prep.

Metal stampings

34614 — NETHERLANDS — Cooking, kitchen utensils, miscellaneous household utensils for use in hospitals, hotels, similar institutions and in catering industry. Exclusive representations requested, also direct purchase. Jos ten Berg's Handelmij. B.V., Attn: Mr. F. J. M. ten Berg (importer, dist., agent), 17-19 Donkerstraat, P.O. Box 2054, Utrecht. WTD in prep.

Fabricated metal products

34942 — NETHERLANDS — Hydraulic and pneumatic valves, including amplifiers. Exclusive representations requested. De Gidts & Feldman N.V., Attn: Mr. J. de Jong (importer, dist., agent), 8 Haringvlietstraat, P.O. Box 7031, Amsterdam. WTD in prep.

Engines, turbines

35195—NETHERLANDS—Outboard motors for yachts, etc. Exclusive representations for Benelux countries. Samia Handelmij. B.V.; Attn: Mr. T. Boeree (importer, dist., agent), 139-141 Van Hallstraat, Amsterdam. WTD 9/72.

Farm machinery

35227 — NETHERLANDS — Lawn mowers, related attachments. Exclusive representations for Benelux countries. Samia Handelmij. B.V.; Attn: Mr. T. Boeree (importer, dist., agent), 139-141 Van Hallstraat, Amsterdam. WTD 9/72.

35228 — NETHERLANDS — Mobile or carrier-based slope-mowers for use in small-scale operations in municipal parks, on soft ground alongside ditches, etc.; hydraulically-operated arms essential, able to extend to at least 16 ft. and permitting use both above and below machine level as well as behind clumps of trees, etc. Brush shredders able to chop up brushwood fine to facilitate its removal by truck, cart, etc. Exclusive agency. H. van der Lienden N.V. (importer, dist., agent), 24 Weltevreden, De Bilt, Utrecht. WTD 1/72.

35228—SOUTH AFRICA—Agricultural, garden sprayers, dusters. Agroquip (Pty.) Ltd. (importer, dist., agent), 1st Floor, United Bldg., Main Rd., P.O. Box 308, Strand, Cape Province. WTD 8/72.

Construction, mining, materials handling machinery, equipment

35340 — ISRAEL — Elevators, electric/hydraulic for passengers and freight; moving stairways and escalators for high buildings; parts, attachments. Exclusive agency. Mimsar Ltd. (dist., wholesale, agent, retailer), 15 Carlebach St., P.O. Box 9154, Tel Aviv. WTD in prep.

Metalworking machinery

35419—CANADA — Attachments, accessories for milling machines, i.e. vices, bench vices, other holding devices — clamps for woodworking and metal industries. The Industrial Distributing Co., Attn: Nicholas Ryback (agent), 3289 Lenworth Dr., Cooksville, Ontario. WTD in prep.

35423 — ISRAEL — Swaging machinery (to join fittings to flexible hoses). Mimsar Ltd. (dist. wholesale, agent, retailer), 15 Carlebach St., P.O. Box 9154, Tel Aviv. WTD in prep.

35453 — CANADA — Lathe and drill chucks. The Industrial Distributing Co., Attn: Nicholas Ryback (agent), 3289 Lenworth Dr., Cooksville, Ontario. WTD in prep.

35482—CANADA—Abrasive or grinding wheels, sanding discs. The Industrial Distributing Co., Attn: Nicholas Ryback (agent), 3289 Lenworth Dr., Cooksville, Ontario. WTD in prep.

35484—NETHERLANDS — Automotive maintenance equipment. Exclusive representations for Netherlands or Benelux countries. Samia Hendelmij. B.V.; Attn: Mr. T. Boeree (importer, dist., agent), 139-141 Van Hallstraat, Amsterdam. WTD 9/72.

35484 — SWITZERLAND — Wheel alignment equipment for automotive trade, service stations. Henri Bachmann SA, Attn: Mario Ruf, Pres. (dist., agent), P.O. Box, 2501 Bienne. WTD 6/72.

Special industry machinery

35513—NIGERIA—Complete, minimum-size plant for extracting juices from oranges, grapefruit, papayas. Mr. N. B. Kole James, Mng. Dir. (mfr.), Kole James & Co. Ltd., 12 Abibu Oki St., Lagos. WTD in prep.

35531—SURINAM — Sawmill machinery (rebuilt). A. J. Hagemeyer (importer, agent), Gravenstraat 65, P.O. Box 2310, Paramaribo. WTD in prep.

35551 — NETHERLANDS — Printing trades machinery; letterpress, offset, gravure, related machinery and attachments. Exclusive representations for Netherlands or Western Europe. Machinehandel Mahez B.V.; Attn: Mr. K. C. Stas (importer, dist., agent), 41 Buyskade, Amsterdam. WTD 9/72.

35552 — KOREA — Paper-shredding machine—100 units; desk top model, 100/110 V capable of cutting strips narrower than 2mm wide; capacity of 6 sheets or more in one passage and passage power of 13 meters or more per min. Requests catalogs, quotations ASAP. Sung Pung Enterprises Co. (importer, dist., agent), I.P.O. Box 2089, Seoul. WTD in prep.

35552 — NETHERLANDS — Typesetting and book binding machinery, equipment; gathering, binding and packaging machinery, related equipment for printing trades. Exclusive Agency. Machinehandel Mahez B.V.; Attn: Mr. K. C. Stas (importer, dist., agent), 41 Buyskade, Amsterdam. WTD 9/72.

35552 — SPAIN — Ticket printing machines. Gispert, S.A., Attn: Sr. Francisco Arnau (importer, dist., agent), Provenza, 206-208, Barcelona 11. WTD in prep.

35595—GERMANY — Special machinery for electric industry; i.e. coil winding machines, insulating machines, metal cutting machines. Dipl. Ing. Ulrich P. Bader (importer, agent), 6227 Oestrich-Winkel, Rieslingstr. 21. WTD 9/72.

General industrial machinery

35612 — NETHERLANDS — Hydraulic fluid power pumps, motors. Exclusive representations requested. De Gidts & Feldman N.V., Attn: Mr. J. de Jong (importer, dist., agent), 8 Haringvlietstraat, P.O. Box 7031, Amsterdam. WTD in prep.

35642 — AUSTRIA — Air purification equipment and air washers for use by chemical, paper, mining, steel and nonferrous metal industries. Hans Bieringer (mfr., agent), Kronbergerweg 2-4, A-4861 Schoerfling, O.Oe. WTD in prep.

35642 — GERMANY — Air purification equipment and air washers. Kunststofftechnik Dinslaken GmbH & Co. KG (dist., mfr.), Box 68, 422 Dinslaken. WTD in prep.

35690 — CANADA — Hydraulic jacks, from 1 to 25 tons. The Industrial Distributing Co., Attn: Nicholas Ryback (agent), 3289 Lenworth Dr., Cooksville, Ontario. WTD in prep.

Office, computing, accounting machines

35730 — AUSTRALIA — Field data logging-agromet equipment. Design Data Services Pty. Ltd., Attn: B. D. Jewell, mng. dir. (importer, dist., agent), 6/547 Toorak Rd., Toorak, Victoria 3142. WTD 1/72.

35731 — FRANCE — Computer software packages. Westinghouse Management Systems S.A. (importer, dist., agent), 41, ave. George V, Paris 8.

35741 — ISRAEL — Calculating, accounting machines including cash registers, parts/attachments. Exclusive agency. Photo Passage & Co. Ltd. (dist., agent, retailer), 111 Allenby Rd., Tel Aviv. Cable: PHOTOPASS TELAVIV, Telex: MOCAR 033-114 IL. WTD in prep.

35791 — SPAIN — Ticket canceling machines. Gispert, S.A., Attn: Sr. Francisco Arnau (importer, dist., agent), Provenza, 206-208, Barcelona 11. WTD in prep.

35741 — UNITED KINGDOM — Desktop calculators, adding machines. Unamec Ltd., Attn: R. L. Hunt, Product Sales Mgr. (importer, dist., retailer), United Africa House, Blackfriars Road, London, S.E. 1. WTD in prep.

35791 — NETHERLANDS — Sorters, filing and office machines; related filing, transport and organizational systems. Exclusive representations requested for Netherlands or Western Europe. Bumas N.V. (dist., agent, retailer), 112-114 Weteringschans, Amsterdam. WTD 8/72.

35741 — SPAIN — Ticket counting machines. Gispert, S. A., Attn: Sr. Francisco Arnau (importer, dist., agent), Provenza 206-208, Barcelona 11. WTD in prep.

35791 — UNITED KINGDOM — Electric office machines, dictating equipment, etc. Unamec Ltd., Attn: R. L. Hunt, Product Sales Mgr. (importer, dist., retailer), United Africa House, Blackfriars Road, London, S.E. 1. WTD in prep.

Service industry machines

35811 — SPAIN — Ticket vending machines. Gispert, S.A., Attn: Sr. Francisco Arnau (importer, dist., agent), Provenza, 206-208, Barcelona 11. WTD in prep.

35850—UNITED KINGDOM—Air conditioning equipment. Unamec Ltd., Attn: R. L. Hunt, Product Sales Mgr. (importer, dist., retailer), United Africa House, Blackfriars Road, London, S.E. 1. WTD in prep.

35851—THAILAND—Sea water ice making machines, capacity 1, 2, 3, 4 or 5 tons per day, for fishing boats. Requests catalogs with full technical data, prices. Sino-British Ltd., Attn: Mr. L. S. Gooding (importer, dist., agent), 287 Suriwongse Rd., Bangkok. WTD in prep.

35892—AUSTRIA—Water pollution control equipment for small and medium-sized industrial enterprises. Hans Bieringer (mfr., agent), Kronbergerweg 2-4, A-4861 Schoerfling, O.Oe. WTD in prep.

Machinery

35990 — ISRAEL — Hydraulic seals, low and high pressure, specifically: high-quality molded seals and packings of rubber and other polymers, for almost all hydraulic and pneumatic applications. Exclusive agency. Mimsar Ltd. (dist., agent, retailer), 15 Carlebach St., P.O. Box 9154, Tel Aviv. WTD in prep.

35990 — SWITZERLAND — Parts, devices for hydraulic, pneumatic process controls. Aerotronic, Attn: Peter Schönburger (importer, dist., agent), Erlenstrasse, Im Blatt, 8832 Wollerau. WTD in prep.

35992 — ISRAEL — Flexible hoses, high and low pressure, for hydraulic applications. Mimsar Ltd. (dist., wholesaler, agent, retailer), 15 Carlebach St., P.O. Box 9154, Tel Aviv. WTD in prep.

35992 — NETHERLANDS — Hydraulic and pneumatic cylinders, related components for hydraulic, pneumatic pressure systems. Exclusive representations. De Gidts & Feldman N.V., Attn: Mr. J. de Jong (importer, dist., agent), 8 Haringvlietstraat, P.O. Box 7031, Amsterdam. WTD in prep.

Electrical industrial apparatus

36220 — SWITZERLAND — Electric and electronic process control devices for industrial applications. Aerotronic, Attn: Peter Schönberger (importer, dist., agent), Erlenstrasse, Im Blatt, 8832 Wollerau. WTD in prep.

Household appliances

36340 — UNITED KINGDOM — Electric domestic appliances, for kitchen, person care, household use. Unamec Ltd., Attn: R. L. Hunt, Product Sales Mgr. (importer, dist., retailer), United Africa House, Blackfriars Road, London S.E. 1. WTD in prep.

Electrical lighting, wiring equipment

36430 — UNITED KINGDOM — Multi-pin connectors; knife switches; precision slip rings; related products for aerospace, medical, marine, and defense equipment industry. William McGeoch & Co. (Birmingham) Ltd., Attn: J. B. Bailey, Sales Mgr. (mfr., exporter), Warwick Works, Coventry Rd., Bordesley, Birmingham B10 OSD. WTD in prep.

Radio, television receiving sets

36510—UNITED KINGDOM—Hi-fi and audio equipment; radio and television receivers; tape recorders and in-car entertainment equipment. Unamec Ltd., Attn: R. L. Hunt, Product Sales Mgr. (importer, dist., retailer), United Africa House, Blackfriars Road, London S.E. 1. WTD in prep.

Communication equipment

36621 — VENEZUELA — Transmitting equipment for commercial and amateur radio operations. Requests catalogs, quotations. Roberto Santos — Comunicaciones "YV" (importer, agent), Conjunto Residencial Bosque San Miguel, Edificio 11, Ofc 3, Piso 2°, Calle Santa Ana, Urbanización Santa María, Caracas. WTD 10/71.

36623 — SPAIN — Safety control equipment, electric signals. MARVE (dist., agent), Garcia Salazar, 32, Bilbao (3). WTD 8/72.

Motor vehicles, equipment

37141 — NETHERLANDS — Automotive accessories. Exclusive representations for Benelux countries. Samia Handelmij. B.V.; Attn: Mr. T. Boeree (importer, dist., agent), 139-141 Van Hallstraat, Amsterdam. WTD 9/72.

37141 —PAKISTAN— Automobile parts, accessories. Requests catalogs, quotations, C. & F., Karachi. Valiuddin Sulemanjee & Co. (importer, agent), Saifee Development Chambers, M.A. Jinnah Road, Denso Hall, Karachi-2. WTD 8/72.

Aircraft, parts

37291 — PAKISTAN — Aircraft parts, auxiliary equipment. Requests catalogs, quotations, C. & F., Karachi. Valiuddin Sulemanjee & Co. (importer, agent), Saifee Development Chambers, M.A. Jinnah Road, Denso Hall, Karachi-2. WTD 8/72.

Ship building, repairing

37321 — SPAIN — Inboard motor boats, nonmilitary. Motormaso, Attn: Sr. José M. Masó (dist., agent, retailer), Entensa, 192-194, bajos, Barcelona 15. WTD 8/72.

37322—SPAIN—Outboard motor boats. Motormaso, Attn: Sr. José M. Masó (dist., agent, retailer), Entensa, 192-194, bajos, Barcelona 15. WTD 8/72.

37323—SPAIN—Sailboats, other pleasure boats. Motormaso, Attn: Sr. José M. Masó (dist., agent, retailer), Entensa, 192-194, bajos, Barcelona 15. WTD 8/72.

Laboratory, scientific instruments

38110—UNITED KINGDOM—Industrial gas detection equipment for toxic gases. J. & S. Sieger Ltd., Attn: R. Cunnell, Dir. (dist., mfr., exporter), 31 Nuffield Estate, Poole, Dorset BH17 7RZ. WTD in prep.

38110—SWITZERLAND—Electronic research and analytical instruments for clinical and chemical laboratories, pollution control, similar application. Digitana AG, Attn: Mr. Haab (importer. dist., agent), Gertrudstrasse 24, 8003 Zürich. WTD in prep.

38112—AUSTRALIA — Laboratory electronic testing equipment. Design Data Services, Attn: B. D. Jewell, mng. dir. (importer, dist., agent), 6/547 Toorak Rd., Toorak, Victoria 3142. WTD 1/72.

38112—DENMARK—Electronic hospital apparatus. Polystan A/S (dist., mfr., agent), 41 Generatorvej, DK-2730 Herlev. WTD 9/72.

Instruments for measuring, indicating, controlling, physical characteristics

38210 — UNITED KINGDOM — Sensors (transducers), pressure, gravity. Mycalex Instruments Ltd., Attn: Gavin W. Paul, marketing dir. (importer, mfr., exporter), Charlton Kings Industrial Estate, Cirencester Rd., Cheltenham, Glos. GL53 8DZ. WTD in prep.

38213—AUSTRIA—Instruments to control and analyze pollution of air and water by industrial enterprises and for continuous quality control. Hans Bieringer (mfr., agent), Kronbergerweg 2-4, A-4861 Schoerfling, O.Oe. WTD in prep.

38213 — FRANCE — Leak detectors and repair devices for water, gas and petroleum piping systems. Direct purchase & agency. Electroma (importer, agent, retailer), 65 Rue d'Adelshoffen, 67 Schiltigheim. WTD in prep.

38216 — NETHERLANDS — Pressure switches for hydraulic and pneumatic systems. Exclusive representations. De Gidts & Feldman N.V., Attn: Mr. J. de Jong (importer, dist., agent), 8 Haringvlietstraat, P.O. Box 7031, Amsterdam. WTD in prep.

Surgical, medical, dental instruments

38410—BRAZIL—Anesthesia apparatus and oxygen tents. S. A. White Martins (dist., agent), Rua Prefeito Olimpio de Melo 1581—Benfica, Rio de Janeiro, GB. WTD 7/72.

38410 — CANADA — Disposable hypodermic needles and syringes; disposable surgical instruments. Exclusive representation for all of Canada. Charles Salama, Spectrex, Ltd. (importer, dist., agent), 2245 St. Francois Rd., Dorval 740, Quebec. WTD 3/72.

38421—BRAZIL — Breathing apparatus, including incubators, respirators, resuscitators, inhalators. S. A. White Martins (dist., mfr., agent), Rua Prefeito Olimpio de Melo 1581—Benfica, Rio de Janeiro, GB. WTD 7/72.

38423—SPAIN—Safety devices, personal, industrial. MARVE (dist., agent), Garcia Salazar, 32, Bilbao (3). WTD 8/72.

Photographic equipment

38610 — UNITED KINGDOM — Professional and amateur photographic equipment. Unamec Ltd., Attn: R. L. Hunt, Product Sales Mgr. (importer, dist., retailer), United Africa House, Blackfriars Road, London, S.E.1. WTD in prep.

38610 — ISRAEL — Photocopying equipment, all kinds; microfilm readers (microfiche type). Exclusive agency. Photo Passage & Co. Ltd. (importer, dist., agent), 111 Allenby Road, Tel Aviv. WTD in prep.

Toys, amusement, sporting goods

39493—SPAIN—Water skis. Motormaso, Attn: Sr. José M. Masó (dist., agent, retailer), Entensa, 192-194, bajos, Barcelona 15. WTD 8/72.

Manufacturing industries

39991—AUSTRALIA — Fire extinguishers for fixed installations; fire extinguishers with heat fusible valves are required. J. G. London & Co., Proprietary Ltd., Attn: G. London (importer, agent, retailer), P.O. Box 136, Albion, Queensland 4010. WTD 7/72.

39991 — DENMARK — Chemical fire extinguishers. V. Burcharth & Son A/S (importer, dist., agent), 9 Vestre Stationsvej, DK-5000 Odense. WTD 9/72.

Future Construction Abroad

HONG KONG — Government of Hong Kong has announced plans for going ahead with a **mass transit system** for Hong Kong. Financing has not been arranged as yet, but final decision whether to proceed will be made by end of the year. If affirmative, construction should start in 1974, first stage being operational within 3¼ years from time of construction and the second stage 15 months later. This large project provides a major opportunity for U.S. firms to participate in financing, construction and equipment. Total cost is estimated at U.S. $1 billion and plus. Consulting engineers for final design study is Freeman Fox of London. A 4-volume set, "Further Studies Final Report on Hong Kong Mass Transit" is available at Government Publications Center, Hong Kong, for US $13, plus postage, and provides detailed information on the project.

BOLIVIA—The Minister of Industry and Commerce, Hector Ormachea, laid the cornerstone for a new **international class hotel** in La Paz. The Hotel Crillon will be built by owners of present Hotel Crillon and financed privately. Hotel Crillon S.A. (Corp.) plan to invest $8 million which will be guaranteed by the Banco del Estado. About $6 million will be spent outside of Bolivia to purchase necessary hotel equipment including swimming pool, auditoriums, theatre seats, elevators, beds, bathroom, and restaurant equipment. The old Hotel Crillon will be sold.

The new hotel will be 17 stories high, have 350 double rooms, 20 suites, a bridal suite, a presidential suite, convention rooms, convention hall for 1,500 persons, a small movie theatre and swimming pool. Although the money to build the hotel is guaranteed by the Banco del Estado, the Hotel Crillon S.A. has not yet arranged the financing to begin construction. However, it is planned to begin construction in October 1972 and finish about two years later.

NEW ZEALAND — The New Zealand Ports' Authority has given the Auckland Harbour Board approval to go ahead with construction of a huge **container packing depot** on the waterfront. The cost is expected to be some $2.5 million, about half of which will be spent on extra mechanical equipment for container handling. It is hoped that the new depot will be completed by September 1973. U.S. suppliers may write: Auckland Harbour Board, P.O. Box 1259, Auckland.

MOZAMBIQUE—Hugo de Freitas, Lourenco Marques, is launching a scheme for the exploiting of Mozambique's well-known but underdeveloped **shellfish resources.** Project anticipates canning factories in Lourenco Marques and Antonio Enes, cold storage facilities where needed, a cold storage ship, etc.

CANADA—Construction started in mid-July on a **$15 million hotel complex** in North Vancouver. The complex will consist of two 25-story towers containing 368 luxury apartments and a four-story, 152-room hotel. There will also be a 200-seat deluxe restaurant, a 150-seat coffee shop, two cocktail lounges, a beer garden, two swimming pools, complete health spa facilities, tennis courts and a nine-hole putting green. It is expected to be completed by December 1973. Interested U.S. suppliers are welcome to bid on all types of supplies and equipment normally required for buildings of this nature, particularly doors, windows, kitchen, electrical, and air-conditioning equipment, and boilers. All inquiries should be addressed to: Dinos Lambrou, President, D. L. Development, 1201 West Pender St., East Asiatic House, Fourth Fl., Vancouver, B.C.

MALAYSIA — Seaports are currently undergoing expansion and improvement. During the second Five-Year Malaysia Development Plan, 1971-75, a total of M$229.8 million (U.S. $1.00 = M$2.75) will be spent on port and marine services in Malaysia. An increase in highway construction and/or improvement will subsequently take place in the new port areas to facilitate road communications between the ports and the areas served.

CANADA—Construction of a $1.25 million **senior citizen apartment complex, consisting of 160 units,** was to commence in Richmond, British Columbia in September. It will be completed about March 1973. Interested U.S. suppliers are welcome to bid on all types of supplies and equipment normally required for a building of this nature. Address all inquiries to: Mr. H. Radcliffe, Superintendent, Murray Hill Development Ltd., 1006 No. 3 Rd., Richmond, B.C.

PORTUGAL—The Government of Portugal has given preliminary authorization for the construction of a **new ship repair facility** in Continental Portugal. The authorization was granted to a group headed by Dr. Miguel Gentil Quina, President of the Banco Borges & Irmao, Largo de Sao Juliao 1/7, Lisbon. Once agreement is reached on a site, the proposed shipyard will be built in several stages: The first stage will consist of the construction of two dry docks, one with a capacity for ships up to 350,000 d.w.t., docks, shops, warehouses and other facilities. The second and following stages will permit the accommodation of ships up to 750,000 d.w.t. by enlarging the first stage dry docks or constructing new ones. The preliminary authorization also stipulated a minimum capital stock of approx. $14.9 million. The total investment will probably reach $44,7 million.

COLOMBIA—Bernardo Sanchez, Public Relations Director of Productora de Papeles S.A. "PROPAL", has announced that construction of a **recovery chemical waste plant** has been undertaken and it is expected to start production in December 1973. It will basically be a chemical waste processing plant, which will recover some 85% of chemicals produced in the manufacturing of pulp and paper. It will be one of the largest in the world in the processing of pulpwaste made from bagasse (sugar cane waste). Total cost of the new plant amounts to $11 million, which includes some $4.6 million in new machinery and equipment ($2.3 million for purchase of machinery in the U.S., and machinery and steel in Finland and Japan respectively for the same amount). Interested U.S. firms should contact Productora de Papeles S.A. "PROPAL", Carrera 8 No. 8-50 Oficina 205 or Apartado Aereo #4412, Cali, Colombia.

EL SALVADOR—President Molina announced on August 14 that the Government of El Salvador has decided to commence immediate construction of the **Rio Lempa Hydroelectric Project (Cerron Grande) Dam,** to be completed within four years. Total cost for the project will be less than $100 million, including buildings, land, machinery and relocation of 1,602 families. The dam will form a 134 square-kilometer artificial lake submerging several villages and many roads. Interested U.S. suppliers of equipment and services should prequalify by sending their company capabilities and specifications to: Harza Engineering Co., 150 South Wacker Dr., Chicago, Ill. 60606.

BELGIUM—Belgium is planning to set up its first **international goods handling traffic center** at Kortrijk, West Flanders, a short distance from the French border. The site should be ready to start operating by 1974. It will centralize arrivals and departures of rail container traffic, all other rail goods traffic, and transfer of containers from rail to trucks and vice versa, and will handle all border and customs formalities. According to the Antwerp press an initial investment of 500 million Belgian francs is foreseen to build the needed infrastructure for the center, which will serve as the first inland container port in Belgium. The Belgian railroads are planning extensive warehouse facilities there, and a high-powered container crane will be installed. It is expected that 100 containers will be handled daily as a start. The initiative for constructing the center is private, although there is hope of receiving government subsidies, which have been requested.

BRAZIL—The Brazilian Government is developing a program called "export corridors," involving the implementation, expansion and modernization of new or existing **port facilities and of the transportation systems** linking these ports to the interior's agriculture production areas. High speed loading systems are to be installed in the ports of Santos, Paranagua and Rio Grande. In the states of Sao Paulo and Parana and Rio Grande do Sul, priority is being given to improvement of the highway system. In a parallel effort, the Federal Railroad System is improving and expanding its transportation facilities in order to compete economically with highway transportation. Much of the equipment needed for the execution of the work for the installation of warehousing, loading and unloading, and port facilities must be imported. The following are the principal types of port equipment to be installed: Receiving System — wagon and truck weighing scales; materials handling equipment such as belt and bucket conveyors; grain elevators. Loading System —scales, conveyors, pneumatic equipment, container handling equipment. Storage System—vertical silos, refrigerated warehouses for beef storage. Transportation—14 dockyard locomotives, each with a capacity for pulling 15 railroad cars. U.S. firms interested in participating in Brazil's "export corridors" program can obtain a list of the Brazilian federal or state agencies to contact directly or through active agents from the U.S. Department of Commerce, Business Opportunities Division, BDC-584, Washington, D.C. 20230, (202-967-3110).

ARGENTINA—The **Alicura Dam Project,** which will cost between $90-100 mil-

lion, is in a very preliminary stage. The first step is a call for the presentation of qualifications on the part of companies interested in doing the feasibility studies, which will be followed by invitations to bid on the study. Companies interested should contact Hidroelectrica Norpatagonica S.A., Av. L.N. Alem 1074, Buenos Aires. Such interest should also be reinforced by arrangements for participation with Argentine consulting companies, because of the "Buy Argentine" law, which requires Argentine national consulting participation, and will apply to this project. The construction of the dam is not to begin for three years; however, this phase will open up numerous sales opportunities. These include turbines (4 x 150mw. units), transformers, switch gear, and support equipment. As large a local content as possible will be required in these purchases. The transmission system from the site to Buenos Aires, Mar del Plata and Bahia Blanca will provide sales of about $40 million alone. This system will involve a substantial quantity of imported equipment also, in the transformer and voltage regulation areas. Low cost financing, possibly from the Export-Import Bank, and competitive pricing will be the key factors in successful sales for the project. The Alicura project will be closely followed by another dam upstream, called the Piedra de Aguila dam. U.S. sales of support equipment are also possible for the turbines which will be installed at the Planicie Banderita power plant on the Cerros Colorados dam. The generating capacity will be 300,000kw.

YUGOSLAVIA—Officials and experts of the Government of Yugoslavia and officials of the Export-Import Bank of the United States have been discussing investment plans for Yugoslav **steel, electricity and non-ferrous metal industries** during the current Five-Year Plan. Further information on these plans is available from the U.S. Department of Commerce, Business Opportunities Division, BDC-584, Rm 4813, Washington, D.C. 20230.

FRANCE — Three plant projects in France offer opportunities for U.S. firms, they are: 1) The French firm Vidmar-France, has purchased a 10-acre piece of land in the industrial zone at Faulquemont (Moselle), eastern France, with a view to build a plant specializing in the manufacture of furniture and metallic shelves. This new plant will cover a 6 to 7000 sq.m. area. Contact: Jose Agusdun, Director, 11 avenue de Villiers, 75017 Paris, Tele: 924-0272. 2) The construction of a 7000 sq.m. women's ready-to-wear plant in western France has recently been made public. This is a project by the French firm France-Elegance. Contact: Denis Biaunie, Commercial Manager, Societe France-Elegance, 6 rue Pierre Lucas, Saint-Gilles-Croix-de-Vie, 85 (Vendee), Tele: 734. 3) A French firm specializing in the manufacture of uniforms and protective clothing is planning to build a 2,500 sq.m. plant in the Nantes area (western France). The foundation is scheduled to be laid in 1973. Contact: Societe Ugeco, Chollet, Berard & Willman, 28, rue de la Chapelle, 75018 Paris, Tele: 205-8539, Mr. Louis Berard, President.

FRANCE—The city of La Rochelle, a coastal city in southwestern France, is seeking additional **industrial activities that will not create pollution problems.** The area has a good harbor and two industrial parks; selected incentives are offered for new firms with more than thirty employees. Possible new ventures include fabrication of auto parts; processing of fruits, vegetables and meat; manufacture of wood products; freeze drying of food; and the development of modest tourist facilities. More details and a brochure on incentives available can be secured from Mayor Nichel Crepeau, 3 Rue Saint Come, 17,000 La Rochelle, France. P-72550.

TAIWAN—Recently listed **ten industries where foreign investment is particularly welcome.** Includes products in basic metal, machinery, electronics, transportation equipment, chemical and food processing industries. Also electrical machinery, plastic and synthetic resins, man-made fibers and other specific areas. Copies of list available from Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-72546.

CANADA—Construction of a $2.5 million **townhouse project,** consisting of 143 units, is expected to commence in Surrey, British Columbia, in January. The project will be completed by September 1974. Interested U.S. suppliers are welcome to bid on all types of supplies and equipment normally required for a project of this nature. Address inquiries to: Fred Babington, General Manager, Nu-West Homes, 320 Columbia St., New Westminster, B.C.

FRANCE—A report on **private construction projects** (apartments & offices) in France is available from the U.S. Department of Commerce, Trade Opportunities Division, BIC-831, Rm 4813, Washington, D.C. 20230. Interested U.S. firms may contact the organizations listed in the report for further details.

ALGERIA—The National Corp. for Fats and Oils (Societe Nationale des Corps Gras—SNCG) which attempts to fulfill Algeria's needs in **edible oils and soap** plans to double its output by 1980. A list of new projects which should be of interest to U.S. suppliers and firms able to set up turnkey plants is available from the U.S. Department of Commerce, Trade Opportunities Division, BIC-831, Rm 4813, Washington, D.C. 20230.

ARGENTINA—A large number of major projects in the **potable water supply and sewage disposal** areas were announced by the Government of Argentina. The civil works on these projects will probably be carried out exclusively by Argentine contractors, as well as a large percentage of the engineering inputs, but U.S. technology in this field could provide interesting opportunities for companies supplying consulting, specialized engineering and other types of advanced know-how. Suppliers of water treatment, solid waste treatment, urban sewage treatment and water purification systems can find sales opportunities. A list of the major projects planned may be obtained from the U.S. Department of Commerce, Trade Opportunities Division, BIC-831, Rm 4813, Washington, D.C. 20230.

THAILAND — The Director-General of Public and Municipal Works Dept. (PMWD) confirmed that Asian Development Bank has approved, in principle, a loan of about $10 million to cover 45% of the total cost of constructing a **fifth bridge across the Chao Phya River** at Sathorn Rd., Bangkok. An international bid will be called in September or October for the design work. After the design work is approved the PMWD will call for a tender on an international basis for the construction. At that time, a bid for supervising engineering service will also be issued. Bidders for the construction will be encouraged to offer alternative sources of financing with better terms, although this may not be stipulated in the tender notice. Write: Damrong Cholvijarn, Director-General, Public & Municipal Works Dept., Pan Fah Bridge, Larn Luang Rd., Bangkok.

THAILAND — The National Executive Council (NEC) is reportedly still working on the draft of a "Special Toll Road Act" which will govern the **special toll road and rapid transit system operations** (see *Commerce Today*, March 6, 1972). While waiting for the Act to be promulgated, a number of proposals from various countries, including the United States, have been received by the Office of the Under Secretary of State in the Ministry of Interior. A subcommittee has been appointed to study these proposals before the enactment of the Act. Interested U.S. firms may obtain additional information by writing to: Prasit Urairud, Inspecting Commissioner, The Office of the Inspecting Commissioners, Ministry of Interior, Asdang Rd., Bangkok.

YUGOSLAVIA—Vojvodina Province authorities have announced that financing for **a natural gas pipeline in Serbia and Vojvodina** had been assembled. The project, estimated at $100 million, has been included in both the Serbian and Vojvodina recently passed Five-Year Social Development Plans. According to the announcement the World Bank will participate in the project with a loan of about $40 million in long-term credits. U.S. suppliers should contact the following organizations: Andras Kovac, Director General, NAFTAGAS, Bulevar Marsala Tita 6, 21000 Novi Sad, Yugoslavia; Mihalj Sefer, President, Pokrajinska privredna komora, Provincial Chamber of Economy, Bulevar Marsala Tita 23, 21000 Novi Sad, Yugoslavia; Dusan Ckrebic, President, Privredna komora Srbije, Serbian Chamber of Economy, Generala Zdanova 13-15, 11000 Belgrade, Yugoslavia.

CANADA—Construction of a **$20 million residential-commercial project,** consisting of 525 units and a shopping center, is expected to commence in Vancouver in October or November. It will be completed about February 1974. Interested U.S. suppliers are welcome to bid on all types of supplies and equipment normally required for a complex of this type. All inquiries should be addressed to: Tom Pierce, Manager of Development, Narod Construction Ltd., 1672 West 2nd Ave., Vancouver, B.C.

THAILAND—The Third Five-Year Plan contemplates a **major television network expansion** which will link the television broadcasting systems of stations in the metropolitan cities of Bangkok and Thonburi with the Northern and Southern regions, and provide facilities for relaying simultaneous live broadcasts. This project is scheduled for completion in 1976. It will involve the establishment of new television transmitting stations in 11 provincial cities and a switching center in Bangkok. Microwave television transmitting equipment will be employed. The entire project is estimated to cost $12 million. Procurement of the television transmitting and video

equipment needed for this project will be made by international tenders. A consultant firm will also be hired for preparing tender specifications and scrutinizing offers from prospective bidders. For additional information, write: Raksak Watanawanich, Deputy Director-General, Public Relations Dept., Rajdamnern Rd., Bangkok.

YUGOSLAVIA—The U.S. Embassy in Belgrade reports the inauguration of the **Ibar-Lepanac Water Development and Hydroelectric Power Project** in Kosovo Province. The $93 million first phase of the project to develop the Ibar and Lepanac rivers concentrates on the Ibar river basin and offers possible export sales for U.S. suppliers of equipment and services. The Ibar river phase calls for irrigation of 75,000 acres. Major construction will include boring 15 tunnels, building 20 aqueducts, 90 miles of main water conduits, two pumping stations and feeder roads. The keystone of the project will be the 600-foot Gazivod dam and 34-megawatt hydroelectric plant; work on the dam will begin next year and on the power plant in 1974, with both to be completed by 1976. A World Bank loan of $45 million will cover the foreign exchange costs of the project. The second Lepanac river phase is to begin in 1976, with completion in 1982. It is planned to include two artificial lakes, a hydroelectric plant and the irrigation of an additional 107,500 acres.

The Kosovo Provincial Government has established a water utility entity, the Ibar-Lapanac Enterprise (ILE), Pristina, Kosovo, Yugoslavia, to oversee the project. Consulting engineers for the project are Energoprojekt, Brankova 4, Belgrade. For further details U.S. suppliers may contact the Office of International Business Assistance, BIC-830, U.S. Department of Commerce, Washington, D.C. 20230, (202-967-5131).

SOUTH AFRICA—The South African Government owned Industrial Development Corp. (IDC), P.O. Box 6905, Johannesburg, has announced plans to develop a **heavy sands (llmenite, rutile and ziron) mining venture** for Kwa Zulu just North of Richards Bay. The IDC has called for tenders for the construction of two pilot treatment plants, one using the wet recovery process, the other the dry. An estimate of $1.26 million will be expended on the initial phase of the project.

AUSTRALIA — The State Electricity Commission of Victoria (S.E.C.) plans to build a **second power station at Yallourn, Victoria, utilizing brown coal.** The new station will be an extension of the Yallourn complex now under construction and will double its generating capacity from 700 to 1400 megawatts. The cost of the project is estimated at A$200 million. The S.E.C. is preparing a full report on the new station which will be submitted to the Victorian Parliament during the present session (Sept.-Nov. 1972). Legislation is expected to be passed during this session as well. Tenders are expected to be called for by the middle of 1973, with sitework expected to start by 1975; completion is planned for 1979. Once the necessary Legislation is passed, copies of the Commission's report will be available to interested parties from the Secretary, State Electricity Commission of Victoria, Monash House, 15 William St., Melbourne, Victoria 3000.

AFGHANISTAN — The Royal Government of Afghanistan, Minister of Communications Malikyar, Kabul, announced Afghanistan's **high priority needs in telecommunications.** They are the establishment of 15 transceiver stations in remote areas of Afghanistan in which no telecommunication facilities exist. The construction of a new HF radio transmitter station and receiver station, equipped with modern HF radio equipment and facilities (Lincompex and ARG) to provide reliable 24-hour international voice and telex services. The Ministry of Communications submitted to the Ministry of Planning and the RGA High Economic Council telecommunication projects for consideration for inclusion in the fourth Five-Year Plan. A copy of the projects is available from the U.S. Department of Commerce, Trade Opportunities Division, BIC-831, Rm 4813, Washington, D.C. 20230.

FINLAND—As a result of an agreement signed in Helsinki 9/19/71, between Finland and the Soviet Union, the Russians will provide **natural gas** to the Finns. The agreement calls for importation of 26.1 billion cubic meters of natural gas for 1974-1993 valued at over 1.6 billion Finnmarks (Fmk 4.10=$1). The state-owned Finnish company Neste Oy has general ersponsibility in Finland for the construction of the **Finnish segment of the pipeline.** Construction in 1973 is scheduled from Imatra, on the Russian-Finnish border, to Kouvola (26" pipe), distance 76.25 miles, and from Kouvola to Kotka on the sea (16" pipe), a distance of 34.4 miles. At the same time many branch lines with sizes down to 4" will be constructed. The estimated cost of the gas pipeline is Fmk 150 million. Neste is planning to have the main and branch pipelines completed in 1973 in order to meet its constructual obligations to start taking Russian gas by 1974. The Finns are beginning to stockpile steel pipe so as to begin construction in 1973. The Russian firm V/O Tsvetmetropmexport is the main contractor for construction of the pipeline both in Finland and Russia and the Finnish firm Lemminkainen Oy (a road paving and asphalt firm) will be responsible for the earth construction in Finland. Informed sources indicate that Finland will have difficulty completing the project on schedule and will most likely be forced to turn to foreign contractors for assistance which could include both equipment, purchase and rental, and know-how. U.S. construction and equipment firms should send brochures about their companies to: Mikko Tanner, Technical Manager, Neste Oy, Kaivokatu 10 A, 00100 Helsinki 10.

BOLIVIA—Officials of Yacimientos Petroliferos Fiscales Bolivianos (YPFB), P.O. Box 401, La Paz, the state petroeum corporation, have announced plans to form a corporation which will install a **pesticide producing plant** in Oruro. The plant will produce annually 3,000 tons of a late type pesticide which is estimated to be marektable at about U.S. $1,000 per ton. oCnstruction costs of the plant are expected to be $8-$10 million. YPFB and probably the Argentine government will participate in the corporation, but up to 30 percent ownership of the corporation is expected to be available to private investors.

INDIA — The Deputy Municipal Commissioner (Special Engineering), Bombay Municipal Corp. (BMC), released a list of material and equipment needed for their proposed **water supply and sewerage project.** Most of these products are likely to be purchased under International Development Association (IDA) financing. According to a BMC official, the present inquiry is only a preliminary nature with the object of locating foreign sources of supply as well as collecting quotations and technical data. International tenders for specific products are not expected until after IDA sanctions the loan. A copy of BMC's preliminary requirements is available from the U.S. Department of Commerce, Trade Opportunities Division, BIC-831, Rm 4813, Washington, D.C. 20230.

BAHAMAS — The Ministry of Works, Government of the Bahama Islands, Nassau, may be in the market for **two desalinization plants** in the near future. The plants should have a daily capacity of 2.6 million U.S. gallons. When a final decision to install new plants is reached a call for bids will be issued. Financing has not yet been arranged for this project. The Ministry of Works is currently carrying out a study to determine whether they should go ahead with the new plants or use their resources to barge water to Nassau from the islands of Abaco and Andros, both of which have substantial water tables which could be tapped. The United Nations Development Program is sending two engineers to assist in the study. The results should be known soon. One desalinization plant has been set up on the island of New Providence by a British licensee of Aquachem (a U.S. firm). A series of difficulties have been encountered and this plant, which has 42 stages, has not yet been put into operation. The consensus is that the Aquachem plant was too complex and efficient for local needs and any new plants should be simpler.

ETHIOPIA—The Finnish architect, Professor Aarno Ruusuvuori, is seeking a contractor for the construction of a complex of buildings (**Development Center Building**) in Addis Ababa, as reported in the last issue of **Commerce Today.** Specifications are now available from the client in charge, Real Estate Development Center, S.C., P.O. Box 1900, Addis Ababa, for 1,500 Ethiopian dollars. Bid deadline is Nov. 1.

French Horticultural Firm Seeks To Expand Line

Compagnie Mediterraneenne de Produits Chimiques, wishes to add specialized horticultural products and fertilizers to its line for distribution in France. C.M.P.C. manufactures and distributes horticultural products and fertilizers. The company also manufactures automotive anti-freeze. The firm seeks products which will complement its present line. The company does not deal in horticultural implements and hardware. Interested U.S. firms should contact: P. Pellegrin, Pres., CMPC, 71 Rue de Miromesnil, Paris 8e. WTD in prep.

Israeli Firm Wants To Purchase Cement

D. H. Tryfus, a leading Jerusalem building contractor, requests price and delivery information c.i.f. Gaza for 50,000 to 100,000 tons of Portland cement. Cable address HABIT, Jerusalem.

Other Foreign Official Tenders

ALGERIA—The Direction Generale De L'Enema has issued Tender No. 6-72 for the supply and installation of **automatic meteorological telecommunications equipment.** Bid deadline Dec. 31. Bid should offer equipment for modernization of an existing meteorological station. Installation, service, training of personnel, and equipment should include telephone and telegraphic equipment, test equipment, facsimile equipment, air conditioning and power equipment. Copies of tender announcement and specifications are available in French from the Direction Generale De L'Enema, Service Financier Bureau 409, Avenue De L'Independence, Algiers, Algeria or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720 1112 U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-4822).

COLOMBIA—Empresas Publicas de Medellin, a public utility, invites tenders for the construction of **saddle dams 5 to 11 along the rim of El Penol reservoir.** The work is divided in two parts. The first part includes saddle dams 5 to 8, and the second part, dams 9 to 11. The bidder may present his proposal for either part or for both. The work for dams 5 to 8 includes: placement of 260,000 cubic meters of compact earth and 120,000 cubic meters of loose earth, as well as miscellaneous minor works. Dams 9 to 11 include placement of 250,000 cubic meters of compact earth and 360,000 cubic meters of loose earth; also some minor works.

The contract will be of the unit type and will be awarded on public bid or bids. The construction must be initiated at the beginning of 1973 to be completed before May 1975. Bids will be considered only for contractors who in the last five years have successfully executed the construction of several earth-fills of the same size and characteristics, and who have proper financial, technical and administrative capacity to execute the work. Address tenders to: Gerencia Tecnica, Empresas Publicas de Medellin, Apartado Aereo 940, Medellin, Colombia, before 5:15 p.m. on October 16. Bid documentation may be obtained from the above address for 1,000 pesos for the first copy and 500 pesos for each additional copy.

GREECE — The Ministry of National Economy (Commerce) has issued Tender No. 934/72 for the supply and installation of **television transmitters.** Bid deadline Oct. 31. Bid should offer five (5) UHF TV transmitters for monochrome and color transmission and operate in Band IV. Transmitters will be installed at, Akarnanika, Thira, Doliana, Ioannina and Vitsi. Copies of tender announcement and specifications are available from the Ministry of National Economy (Commerce), 4th Directorate of State Purchases, Canningos Square, Athens or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 1112, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-4822).

INDIA—The West Bengal State Electricity Board has issued Tender No. IDA/WBSEB/4 for the supply of **carrier current communications systems.** Bid deadline Dec. 29. Bid should offer carrier current communications systems including, telemetry, telecontrol, and local frequency control equipment. Copies of tender announcement and specifications are available from the Superintending Engineer (Stores & Purchases) West Bengal State Electricity Board, 6 Little Russell St., Calcutta 16, West Bengal for $20 per copy (inclusive of postage) or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 1112, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-4822).

PAPUA/NEW GUINEA—The Dept. of Posts and Telegraphs of Papua/New Guinea has issued tender No. A 2277 for the supply of **telephones.** Bid deadline is 1:30 p.m., Nov. 28. Bid should offer 7,600 various types of telephones per year for the period July 1, 1973 to June 30, 1976. Copies of tender announcement and specifications are available from the Superintendent of Supply, Dept. of Posts and Telegraphs, P.O. Box 6352 Boroko, Papua, New Guinea, and Messrs. Preece Cardew and Rider, Consulting Engineers, Paston House, 165-167 Preston Rd., Brighton BN1 6AF Sussex, United Kingdom. One copy is available on a review basis to firms located in the U.S. in the Communications-Electronics Division, BDC-720, Room 1112, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4822).

EL SALVADOR — The Administracion Nacional De Telecomunicaciones (ANTEL) has issued tender No. 7/72 for supply and installation of **six automatic telephone exchanges.** Bid deadline is Nov. 27. Copies of tender announcement and specifications are available from ANTEL, Calle Ruben Dario Y 5A Avenida Sur, San Salvador, El Salvador for $120 per copy.

INDIA—The Chief Purchase Officer and Controller of Stores has issued tender No. IDA/MSEB/10 for the supply of **power line carrier communication and carrier protection telemetry equipment.** Bid deadline is 1 p.m., Nov. 27. Copies of tender announcement and specifications are available from the Chief Purchase Officer and Controller of Stores, Maharashtra State Electricity Board, New Kamani Chambers, 32 Nicol Rd., Ballard Estate, Bombay 1, for $13.70 per copy.

EL SALVADOR — The Administracion Nacional De Telecomunicaciones (ANTEL) has issued tender No. 9/72 for **telephones.** Bid deadline is Nov. 20. Bid should offer 1,300 dial type telephones and 2,000 push-button type. Copies of tender announcement and specifications are available from ANTEL, Calle Ruben Dario Y 5A Avenida Sur, San Salvador for $40 for first set and $10 for each additional set, or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720 Room 1112, U.S. Department of Commerce, Washington, D.C. 20230, ★(202-967-4822).

LIBYA—The Posts and Telecommunications Corp. has issued tender No. 10/72/73 for the supply and installation of **telex exchanges.** Bid deadline is Dec. 2. Bid should offer exchanges with capacity of 500 and 250 lines with a capability for expansion. Copies of tender announcement and specifications are available from the Posts and Telecommunications Corp., Alger Square, Tripoli for $154 per copy.

ALGERIA—The Government is seeking tenders for the turnkey construction of a **plant to manufacture polyvinyl chloride sheets and plates** for use in wall coverings and architecture uses. The capacity of the plant will be 4,000 tons per year. The project will involve 1) study, 2) supply of all equipment, transportation to the site in the Setir region, and assembly, 3) design, civil engineering work, and construction of building, 4) training of plant workers, and 5) technical assistance for operating the plant. Bid deadline is Dec. 18. The bid envelope is to be marked: "*Ne pas ouvrir—confidentiel*", *a l'attention de M. Ahmed Ghozali, President-Directeur General*, "*Soumission pour la realisation d'une unite de feuilles et plaques en P.V.C.*" Tender documents may be obtained by sending DA 1,000 (approximately $200) to: Le Chef du Projet Plastiques, 17, Rue de la Liberte, Algiers, Algeria. Telex: SONATRA 91916 projet plastiques, to the attention of M. Lakehal. Correspondence is preferred in French.

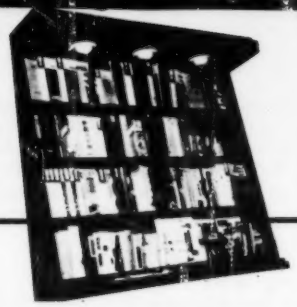
PANAMA—The Government's Directorate of Civil Aviation has announced a bid call for Project No. 2 of the **Tocumen International Airport,** which is World Bank-financed. Project No. 2 includes site preparation, grading and drainage work. Proposals will be accepted until 10 a.m., Nov. 15 at the Directorate of Civil Aviation, Balboa Ave. and 40th St., Panama City. Complete plans and specifications can be obtained for $300 (non-refundable) from the Directorate at the above address or from Parsons Engineering Corp., 617 W. 7th St., Los Angeles, Calif. 90017.

Contractors Can Register To Build Malaysian Quay

The Malaysian Ministry of Communications invites applications from experienced contractors to register with the consulting engineering firm, Messrs. Christiani & Nielsen A/S, Vester Farimagsgade 41, DK-1501 Copenhagen V, Denmark, or in care of Sepakat Setia Perunding, 179-E Jalan Ipoh, P. O. Box 904, Kuala Lumpur, to tender for the construction of a quay at the Port of Johore (State of Johore). The quay comprises a 350-ft. long coaster berth with 18 ft. water depth and two ocean berths, each 600 ft. long with 36 ft. water depth all in steel sheet piled construction. Dredging will be done by others under a separate contract. Work is scheduled to start in June; the construction period will be 15 months.

Applicants must furnish detailed information about their company, including names of directors or partners, date of registration, paid-up capital, affiliations, bankers, details of similar works carried out and in progress, and major plant available for this work.

Applications in triplicate are to reach the consulting engineers not later than November 30.



New Publications

When ordering any publications, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

OFFICE OF THE SECRETARY

Export control. 100 quarterly report, 2nd quarter 1972, by the Secretary of Commerce to the President, the Senate, and the House of Representatives. August 15, 1972. 64pp. 35¢.

MARITIME ADMINISTRATION

Publications of the Maritime Administration. September 1972. 12pp. Free upon request.

Merchant fleets of the world—oceangoing steam and motor ships of 1,000 gross tons and over. As of December 31, 1971. Report No. MAR-560-20. 20pp. 20¢.

DOMESTIC AND INTERNATIONAL BUSINESS

BUREAU OF INTERNATIONAL COMMERCE

Export control bulletin—supplement to Export Control Regulations (ECB-OEC-69). Subjects: Relaxation of controls for exports to Hong Kong and Macao; (II) Revision of commodity control list format to include GLV dollar-value limits for country group Q; (III) Revision of commodity control list; (IV) Revision of denial and probation orders. 40¢.

Export control bulletin—supplement to Export Control Regulations (ECB-OEC-70). Subject: Most exports to Canada require no license. 40¢.

International Marketing Information Service

Exhibitor's Export Market Guide

Japan's $100 million analytical instrument market offers promising sales opportunities (IMIS 72-026). 8pp. 10¢.

U.S. security equipment has excellent sales potential in United Kingdom (IMIS 72-033). 8pp. 10¢.

Overseas Business Reports

Annual subscription $16 ($5 more for foreign mailing). Single copy 15¢.

Selling in Liberia (OBR 72-036). 16pp.

International Economic Indicators — a quarterly report (OBR 72-041). 40pp.

Market factors in Greece (OBR 72-044). 8pp.

ECONOMIC AFFAIRS

SOCIAL AND ECONOMIC STATISTICS ADM.

Business conditions digest. Series ES1 No. 72-8. Data through July. Annual subscription including supplement $15 ($3.75 more for foreign mailing). Single copy $1.50.

Survey of current business. Vol. 52, No. 5, part II. The measurement of productivity.

Survey of current business. Vol. 52, No. 8. Annual subscription, including weekly statistical supplement $9 ($3.75 more for foreign mailing). Single copy $1.

BUREAU OF THE CENSUS

Agriculture

1969 Census of Agriculture

Agricultural services. Type of organization-gross receipts-payroll-labor. Volume III. June 1972. 86pp. $1, paper. This is a new report which will contain data relating to agricultural services.

Data-collection forms and procedures, part 13, Vol. V—special reports. 110pp. $1 (paper).

Annual survey of manufactures: 1970, statistics for divisions and States, part 8 — Mountain Division (M70(AS)-6.8). 12pp. 25¢. This report is a preprint of a chapter in the Annual Survey of Manufactures: 1970 volume.

Construction and Housing

Housing authorized by building permits and public contracts: June 1972 (C40-72-6). Series C40, $8 per year; $2 more for foreign mailing; single copy (annual), $2; single copy (monthly) 55¢.

1970 Census of Housing

Metropolitan Housing Characteristics

Los Angeles-Long Beach, Calif. standard metropolitan statistical area (HC(2)-120). 324pp. $2.50.

Distribution and Services

Monthly selected services receipts: July 1972 (BS-72-7). 12pp. Annual subscription $1. Single copy 10¢.

Advance monthly retail sales: August 1972 (CB-72-219). 2pp. 10¢.

Weekly retail sales. Estimated sales of U.S. retail stores for week ending September 2 (CB 72-217). 2pp. 10¢.

Weekly retail sales. Estimated sales of U.S. retail stores for week ending September 9 (CB 72-223). 2pp. 10¢.

Foreign Trade

General imports cotton manufactures: July 1972 (FT 130-72-7). 12pp. Annual subscription $1. Single copy 10¢.

Waterborne exports and general imports: May 1972 (FT 985-72-5). Annual subscription (FT 900, 975, 985, and 986 combined) $3. Single copy 10¢.

Governments

Holdings of selected public employee retirement systems: June 20, 1972 (GR 72 No. 2). 1p. 25¢.

Industry

Annual survey of manufactures: 1970 (M70(AS)-6.0). 2pp. Single copy 25¢.

Tire cord and tire cord fabrics: second quarter 1972 (Series: MQ-22T.4(72)-2). 4pp. $1 per year. Single copy 25¢.

Cotton broadwoven gray goods: summary for 1971 (Series: MQ-22T.1(71)-5). 8pp. $1 per year. Single copy 25¢.

Fats and oils production, consumption and stocks: July 1972 (preliminary). (Series: M20K(72)-7). 16pp. $3 per year (incl. Series M20J). Single copy 15¢.

Pulp, paper, and board: 1971 (Series: M26A(71)-13). 28pp. $1.50 per year. Single copy 15¢.

Sulfuric acid: 1971 (Series: M28A(71)-13 supplement 1). 8pp. $1.50 per year. Single copy 15¢.

Broadwoven fabrics finished: 1971 (Series: MA-22S-(71)-1). 8pp. Copy 25¢.

Manmade fiber broadwoven gray goods: summary 1971 (Series: MQ-22T.2(71)-5). 8pp. $1 per year. Single copy 25¢.

Wool broadwoven goods second quarter 1972 (Series: MQ-22T.3(72)-2). 8pp. $1 per year. Single copy 25¢.

Population

Population Estimates and Projections

Estimates of the population of States: July 1, 1971 and 1972 (advance report). (Series: P-25, No. 488). 2pp. 5¢.

1970 Census of Population

Detailed Characteristics

South Dakota (PC(1)-D43). 335pp. $2.50.

ECONOMIC DEVELOPMENT

ECONOMIC DEVELOPMENT ADMINISTRATION

Economic Development. September 1972. Vol. 9, No. 9. Annual subscription $1 (50¢ more for foreign mailing). Single copy 15¢.

SCIENCE AND TECHNOLOGY

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Environmental Data Service

Daily weather maps, weekly series. August 28-September 3, 1972. Annual subscription $7.50. Domestic airmail $5.20 more. Foreign surface mail $7.50 more. Single copy 15¢.

Monthly climatic data for the world. Vol. 25, No. 2. February 1972. Annual subscription $2.75 ($1 more for foreign mailing). Single copy 25¢.

Mariners weather log. Vol. 16, No. 5. Available from the Environmental Data Service, Gramax Building, (D54), 8060 - 13th St., Silver Spring, Md., 20910.

National Environmental Satellite Service

Satellite measurement of aerosol backscattered radiation from the nimbus F earth radiation budget experiment (Tech. Report NESS 60). 14pp. 25¢.

National Ocean Survey

Tide tables—high and low water predictions 1973 Central and Western Pacific Ocean and Indian Ocean. Issued 1972. 386pp. $2. For sale by the National Ocean Survey and its agents.

NATIONAL BUREAU OF STANDARDS

Selected specific rates of reactions of the solvated electron in alcohols (NSRDS—NBS 42). 22pp. 30¢.

Technical news bulletin. September 1972. Vol. 56, No. 9. Annual subscription $3 ($1 more for foreign mailing). Single copy 30¢.

Testing and fabrication of wire-bond electrical connections—a comprehensive survey (Tech. Note 726). 140pp. $1.25.

Performance concept in buildings (Spec. Publ. 361, Vol. 2). 169pp. $1.75.

Dental materials research (Spec. Publ. 354). 238pp. $3.75. Contains the proceedings of the 50th Anniversary Symposium, October 1969.

Methods of measurement for semiconductor materials, process control, and devices (Tech. Note 733). Quarterly report—January 1 to March 31, 1972. 59pp. 60¢.

Activation analysis: a bibliography through 1971 (Tech. Note 467). 892pp. $7.

The science of ceramic machining and surface finishing (Spec. Publ. 348). 431pp. $5.25 (hard cover). This volume presents the proceedings of the Symposium on the Science of Ceramic Machining and Surface Finishing held at the NBS Nov. 2-4, 1970.

Standard reference materials: selection of differential thermal analysis temperature standards through a cooperative study (SRM 758, 759, 760) (Spec. Publ. 260-40). 71pp. 65¢. The testing and evaluation program leading to the certification of 10 materials is described.

Standard reference materials: use of standard light-sensitive paper for calibrating carbon arcs used in testing textiles for colorfastness to light. (Spec. Publ. 260-41). 24pp. 30¢.

National Standard Reference Data Center

Tables of molecular vibrational frequencies consolidated: Vol. 1 (NSRDS-NBS 39). 164pp. $3. (hard cover). This consolidated volume includes data on a total of 223 molecules.

NATIONAL TECHNICAL INFORMATION SERVICE

Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price of each document is $3, unless otherwise specified. All reports are available in microfiche for 95¢ apiece.

Report of the United Nations conference on the Human Environment, held at Stockholm (PB-211 133). June 5-6, 1972, Secretariat of the United Nations Conference on the Human Environment, Geneva, Switzerland, 145pp.

Microcircuit device failure rates (AD-746-184). Reliability Analysis Center, Chicago, Ill., June 1972, paper copy only, $50, 143pp.

CdS Crystals (AD-742 200). Defense Documentation Center, Alexandria, Va., May 1972, paper copy $6, 534pp.

Legal aspects of the utilization of artificial satellites for meteorological and radio communication purposes (N72-20942), USSR Academy of Sciences. 156pp. Examines the problem of radio frequency allocation for space services, defines international legal principles involved in creating and exploiting a system of radio communications via satellites, and discusses legal status of the separate components of the system.

An advanced health planning system (PB-210 647). Government Studies and Systems, Inc., Philadelphia. 211pp.

Use of reactor cooling water from nuclear power plants for irrigation of agricultural crops (PB-210 747). Oregon State Univ. 109pp. Gives results of field tests conducted with heat applied to the soil through underground pipes and crops grown under controlled conditions.

Forest products pollution control: annotated bibliography (excluding pulp and paper). (PB-210 728). Canadian Forestry Service, Vancouver. 22pp. Cites references dealing with air, water, and noise pollution due to manufacturing and logging operations.

Long range sulfur supply and demand model (PB-208 993). Esso Research and Engineering Co., Linden, N.J., paper copy $6, 422pp.

Detailed cost breakdown for selected sulfur oxide control processes (PB-209 024). M. W. Kellogg Co., Houston, Tex., 44pp.

Some aspects of the environment and electric power generation (AD-741 605), Rand Corp., Santa Monica, Calif., 32pp. Discusses relationship between electric power generation and the environment, with emphasis on cost estimates for devices to control pollution.

Effects of polonium-210 on the organism (AEC-TR-7300). Translation from Russian (1971), 174pp.

Pricing and efficency in water resource management (PB-209 083). George Washington Univ., Washington, D.C., for the National Water Commission, paper copy $6.75, 283 pp.

Legal devices for accommodating water resources development and environmental values (PB-208 835). National Water Commission, Arlington, Va., paper copy $13.50, 763pp.

Natural disaster operations planning (AD-740 187). Stanford Research Institute, Menlo Park, Calif., 63pp.

The changing structure of employment and income in the regions of the United States (COM-72-10272). U. of Georgia. 315pp. $6. Compares growth of the eight geographic regions of the United States, as designated by the Office of Business Economics, to growth of the national economy. Detailed information on employment, average wages, and employment projections for various states is given.

The reuse of water in manufacturing: an explanatory model with data analysis (PB-207 138). U. of New Mexico. 32pp.

Industrialized housing: the opportunity and the problem in developing areas (PB-206 851). Org. for Social and Technical Innovation, Cambridge, Mass. 80pp.

Oil spill containment systems (PB-206 797). Edison Water Quality Lab, N.J. 140pp. Discusses commercial floating booms, multi-purpose booms, improvised booms, and air barriers.

Cost nomographs of selected sulfur dioxide abatement methods (PB-207 108). Hittman Assoc., Columbia, Md. 148pp.

Pollution abatement and unemployment (PB-207 109). Institute of Public Admin., Washington, D.C. 154pp. Develops a methodology to estimate the magnitude of unemployment that may be expected as a result of plant closures caused by pollution abatement requirements. Report specifies types of financial assistance required to avoid closure, and describes kinds of plants affected and programs which can be instituted.

The following reports, available only in microfiche, assess the economic impact on the paper and related industries of air and water pollution control requirements anticipated through 1976:

Economic impact of anticipated paper industry pollution abatement costs: Part I—Executive summary

Costs: (PB-207 144). 19pp.

Same title: Part II—Industry structure and business outlook (PB-207 145). 73pp.

Same title: Part III—Economic analysis (PB-207 146). 70pp.

Progress through modern processes and tools (PB-205 287). Agency for International Development. 332pp. $6. Specific topics covered in the report include: organizing for effective control of quality and production; cost reduction; drafting room practice and tool engineering data; steel specifications (heat-treatment and uses); jigs and fixtures; standard clamps; standard bushings; carbide cutting tools; steel stamping dies; die casting instructions; compression and transfer molding equipment (plastic dies); and foundry equipment and processes.

Semiconductor lasers (AD-732 700). Defense Documentation Center. 132pp. Bibliography dealing with theoretical and experimental studies of various lasing techniques. All reports listed are available from NTIS.

Development of high-energy batteries for electric vehicles (PB-205 254). Argonne National Lab. 98pp.

Artificial intelligence (AD-731 310). NATO Advisory Group for Aerospace Research and Development. 336pp. $6. Papers presented at a symposium held in Rome cover pattern recognition, robotry and robot vision, question-answering, natural language and speech recognition, and man-machine interactive problem solving.

A study of markets for air pollution measurement instrumentation: 1971-80 (PB-204 174). Esso Research and Engineering Co. for the Environmental Protection Agency. 97pp. Estimates the market for three areas of measurement instrumentation: ambient level monitoring, stationary source emission measurement, and auto exhaust measurement.

Sources of information on occupational cancer in the United States (PB-205 853). National Institute for Occupational Safety and Health. 32pp. $4.75. Compiles (1) major institutions and agencies engaged in occupational cancer research in the U.S., 1971; (2) selected list of U.S. scientists engaged in occupational cancer and allied research, 1971; (3) selected bibliography on occupational cancer in the U.S. 1950-1971; and (4) selected list of reference books and monographs on occupational cancer in the U.S.

Regional economic development—the role of water (PB-206 372). Utah State U. Foundation. 365pp. $9.

Pension fund investment for home ownership (PB-209 261). Forest City Enterprises, Cleveland. Paper copy $4.50. 67pp. Discusses a system that enables employees to finance up to 100 percent of the purchase price of a house. Report focuses on participants in profit-sharing plans and pension funds.

Nonlethal weapons for law enforcement: Research needs and priorities (PB-209 261). Security Planning Corp., Washington, D.C. Paper copy $4.50. 70pp.

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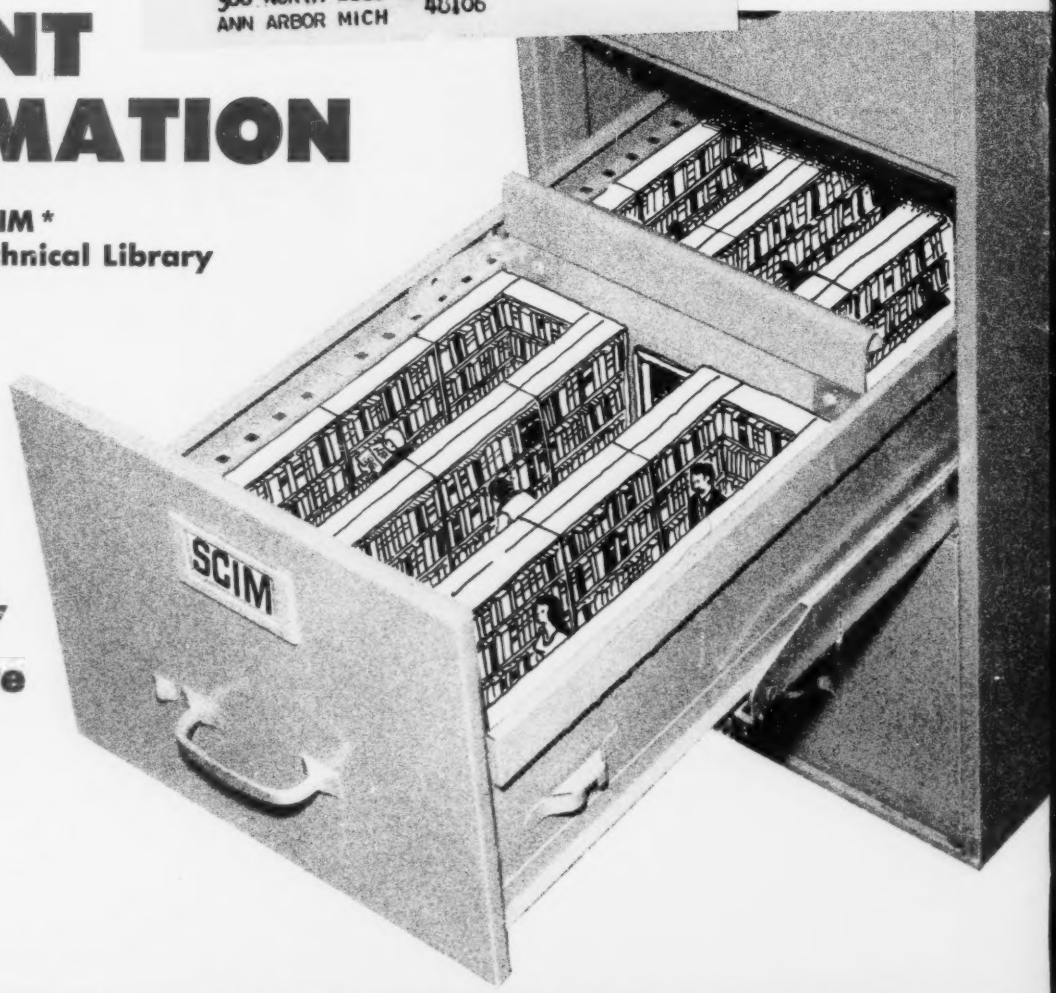

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